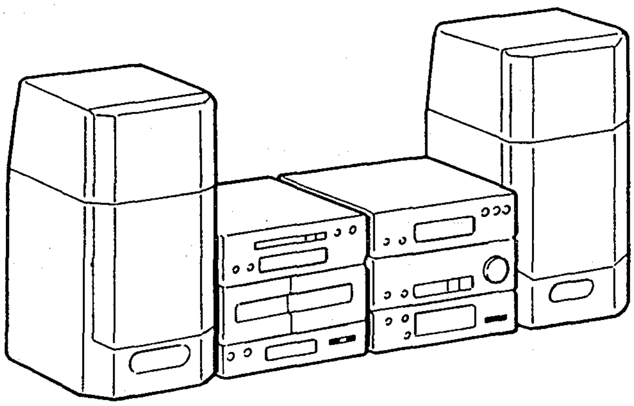
FH-E737CD/E838CD, MHC-2600/3600

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
MHC-2600/3600

E Model
Australian Model
FH-E737CD/E838CD



FH-E838CD, MHC-3600

SPECIFICATIONS

Power requirements
US, CND models : 120V AC, 60Hz
AEP, G, IT models :
220-230V AC, 50/60Hz
UK model : 240V AC, 50Hz
E, EA AUS models :
120V, 220V, or 240V AC
adjustable, 50/60Hz

Power consumption

	MHC-2600 FH-E737CD	MHC-3600 FH-E838CD
US model	100W	130W
CND AEP, G, IT, E, EA, AUS models	110W	140W
UK model	195W	310W

Dimensions
MHC-2600/FH-E737CD :
Approx. 225 × 365 × 275 mm (w/h/d)
(8 7/8 × 14 3/8 × 10 7/8 inches)
MHC-3600/FH-E838CD :
Approx. 225 × 365 × 270 mm (w/h/d)
(8 7/8 × 14 3/8 × 10 3/4 inches)
incl. projecting parts and controls

Weight
MHC-2600/FH-E737CD :
Approx. 9.6 kg (21 lb 3 oz)
MHC-3600/FH-E838CD :
Approx. 11.0 kg (24 lb 4 oz)

Design and specifications subject to change without notice.

MICROFILM

•FH-E737CD/E838CD and MHC-2600/3600 are composed of the following models. As for the service manual, it is issued for each component models, then please refer to it.

COMPONENT MODEL NAME FOR FH-E737CD/E838CD and MHC-2600/3600

System / Component	MHC-2600/FH-E737CD		MHC-3600/FH-E838CD	
	except US, Canadian models	US, Canadian models	US, Canadian models	except US, Cnadian models
Amplifier	TA-H2600		TA-H3600	
CD player	CDP-H3600			
Tuner	ST-H3600			
Cassette deck	TC-H2600	TC-H3600		
Speaker System	SS-H2600			SS-H3600

NOTE :
CND : Canadian model
G : Germany model
IT : Italian model
EA : Saudi Arabia model
AUS : Australian model

MINI HI-FI COMPONENT SYSTEM

SONY®

PARTS LIST

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	**Note:** Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

ACCESSORY & PACKING MATERIALS

Ref. No.	Part No.	Description	Remarks
	1-465-703-11	REMOTE COMMANDER(RM-S360)(3600, E838CD)	
	1-463-704-11	REMOTE COMMANDER(RM-S260) (2600:AEP, UK, G, IT, E737CD)	
	1-465-705-11	REMOTE COMMANDER(RM-S355)(2600:US, CND)	
	1-501-369-11	ANTENNA(FM)(AEP, UK, G, IT)	
	1-501-374-11	ANTENNA, LOOP(AM)	
	1-501-224-00	ANTENNA, FEEDER(FM)(US, CND)	
	1-535-706-11	PLUG, JUMPER(H3600:E, EA)	
	⚠1-558-032-11	CORD, POWER(UK)	
	⚠1-575-131-11	CORD, POWER(AEP, G, IT, EA)	
	⚠1-575-706-11	CORD, POWER(US, CND)	
	⚠1-555-074-00	CORD, POWER(AUS)	
	⚠1-556-280-00	CORD, POWER(E)	
	⚠1-569-007-11	ADAPTER, CONVERSION 2P(E)	
	⚠1-569-008-11	ADAPTER, CONVERSION 2P(EA)	
	1-590-870-11	CORD(WITH CONNECTOR)17P(TA-TC-CD)	
	1-574-927-21	CORD(WITH CONNECTOR)15P(TA-ST)	
	1-590-855-11	CORD, SPEAKER(3600, E838CD)	
	1-557-954-21	CORD, SPEAKER(2600, E737CD)	

Ref. No.	Part No.	Description	Remarks
	3-753-175-11	MANUAL, INSTRUCTION(3600:AEP, UK, E838CD) (English, French, Spanish, Chinese)	
	3-753-175-21	MANUAL, INSTRUCTION(3600:US, CND) (English, French)	
	3-753-175-41	MANUAL, INSTRUCTION(3600:AEP, G, IT) (German, Dutch, Swedish, Italian, Portuguese)	
	3-753-277-11	MANUAL, INSTRUCTION(2600:AEP, UK, E737CD) (English, French, Spanish, Chinese)	
	3-753-277-21	MANUAL, INSTRUCTION(2600:US, CND) (English, French)	
	3-753-277-41	MANUAL, INSTRUCTION(2600:AEP, G, IT) (German, Dutch, Swedish, Italian, Portuguese)	
	3-707-584-01	COVER, BATTERY(for RM-S260, S355)	
	4-945-647-01	LID, SLIDE(for RM-S360)	
	4-945-648-01	CASE, BATTERY(for RM-S360)	
	* 4-945-070-01	INDIVIDUAL CARTON(TA, TC, ST, CDP)(2600:AEP, UK)	
	* 4-945-154-01	INDIVIDUAL CARTON(TA, TC, CDP)(2600:AEP, G, IT)	
	* 4-947-013-01	INDIVIDUAL CARTON(2600:US, CND)	
	* 4-945-151-01	INDIVIDUAL CARTON(TA, TC, ST, CDP)(3600:AEP, UK)	
	* 4-945-153-01	INDIVIDUAL CARTON(TA, TC, CDP)(3600:AEP, G, IT)	
	* 4-946-068-01	INDIVIDUAL CARTON(3600:US, CND)	
	* 4-945-727-01	INDIVIDUAL CARTON(E737CD:E, EA)	
	* 4-945-728-01	INDIVIDUAL CARTON(E737CD:AUS)	
	* 4-945-729-01	INDIVIDUAL CARTON(E838CD:E, EA)	
	* 4-945-730-01	INDIVIDUAL CARTON(E838CD:AUS)	

English
91E1695-1
Printed in Japan
© 1991.5
Published by Customer Relations and Service Group

9-956-470-11

Sony Corporation
Audio Group

TA-H2600

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model

SONY
POWER
ON/STANDBY
HEADPHONES
WAKE UP
MHC-2600
FUNCTION
VOLUME
MIN
MAX
MIC LEVEL
DISPLAY
MIX MIC
DIRECT
EQ
P-SUR
DBFB
PRESET

This set is the Amplifier
section in MHC-2600 and
FH-E737CD.

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS (US model)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:
With 6 ohm loads both channels driven, from 70 - 20000 Hz; rated 30 watts per channel minimum RMS power, with no more than 1% total harmonic distortion from 250 milliwatts to rated output.

Continuous RMS power output	30 + 30 watts (6 ohms at 1 kHz, DIN) 35 + 35 watts (6 ohms at 1 kHz, 5% THD)
Music power output	55 + 55 watts (6 ohms at 1 kHz, 10% THD)
Peak music power output **(E, Saudi Arabia model)**	330 watts
Inputs	MIX MIC (minijack): sensitivity 1 mV, impedance 600 ohms ADAPTOR (pin jacks) **(E, Saudi Arabia model)** sensitivity 300 mV, impedance 47 kilohms
Outputs	HEADPHONES (stereo minijack): accepts headphones of 8 ohms or more. ADAPTOR (pin jacks) **(E, Saudi Arabia model)** output level 300 mV impedance 10 kilohms

Design and specifications subject to change without notice.

STEREO AMPLIFIER

SONY®

MICROFILM

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer: Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig.A)

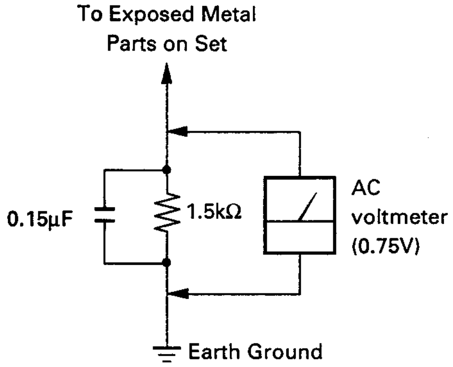


Fig. A. Using an AC voltmeter to check AC leakage.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT
À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÉCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER SES COMPOSANTS QUE PAR DES PIÉCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

TABLE OF CONTENTS

Section Title Page

1. GENERAL

Location of Controls 3

2. DISASSEMBLY 4

3. DIAGRAMS

3-1. Circuit Boards Location 6
3-2. Semiconductor Lead Layouts 7
3-3. Printed Wiring Boards - Main section - 9
3-4. Schematic Diagram - Main section - 11
3-5. Printed Wiring Boards
- Panel, Power section - 16
3-6. Schematic Diagram
- Panel, Power section - 21
3-7. IC Block Diagrams 25
3-8. Pin Functions of IC501 28

4. EXPLODED VIEW 30

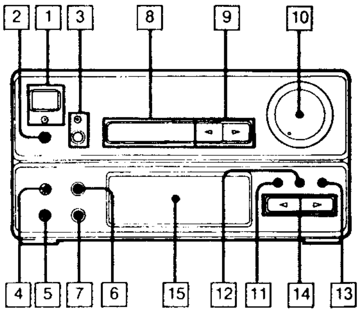
5 . ELECTRICAL PARTS LIST 32

SECTION 1
GENERAL

LOCATION OF CONTROLS

This section is extracted from instruction manual.

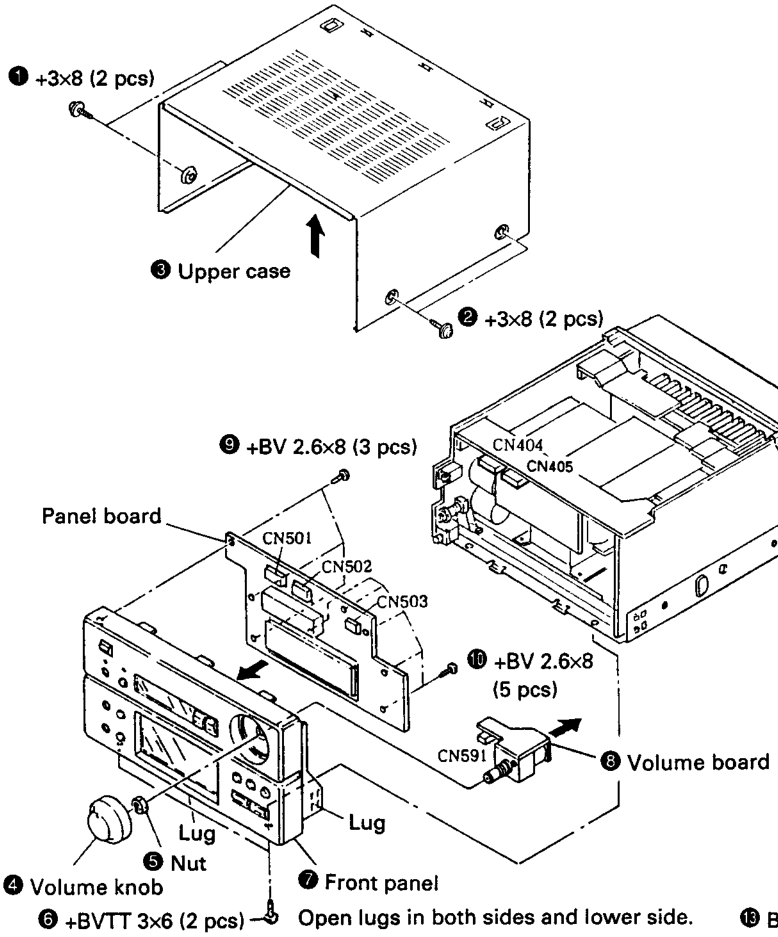
1 SYSTEM POWER switch and STANDBY indicator
The indicator remains lit as long as the AC power cord is connected to a wall outlet.
2 HEADPHONES jack (stereo minijack)
3 WAKE UP button and indicator
4 MIC (microphone) LEVEL control
5 MIX MIC (microphone) input jack
6 DISPLAY button
7 DIRECT button
8 Function indication display
9 FUNCTION <> buttons
10 VOLUME control
11 EQ (equalizer) button and indicator
12 S-SUR (simulated surround) button and indicator
13 DBFB (Dynamic Bass Feedback) button and indicator
14 PRESET ◁▷ buttons
15 Display window



SECTION 2
DISASSEMBLY

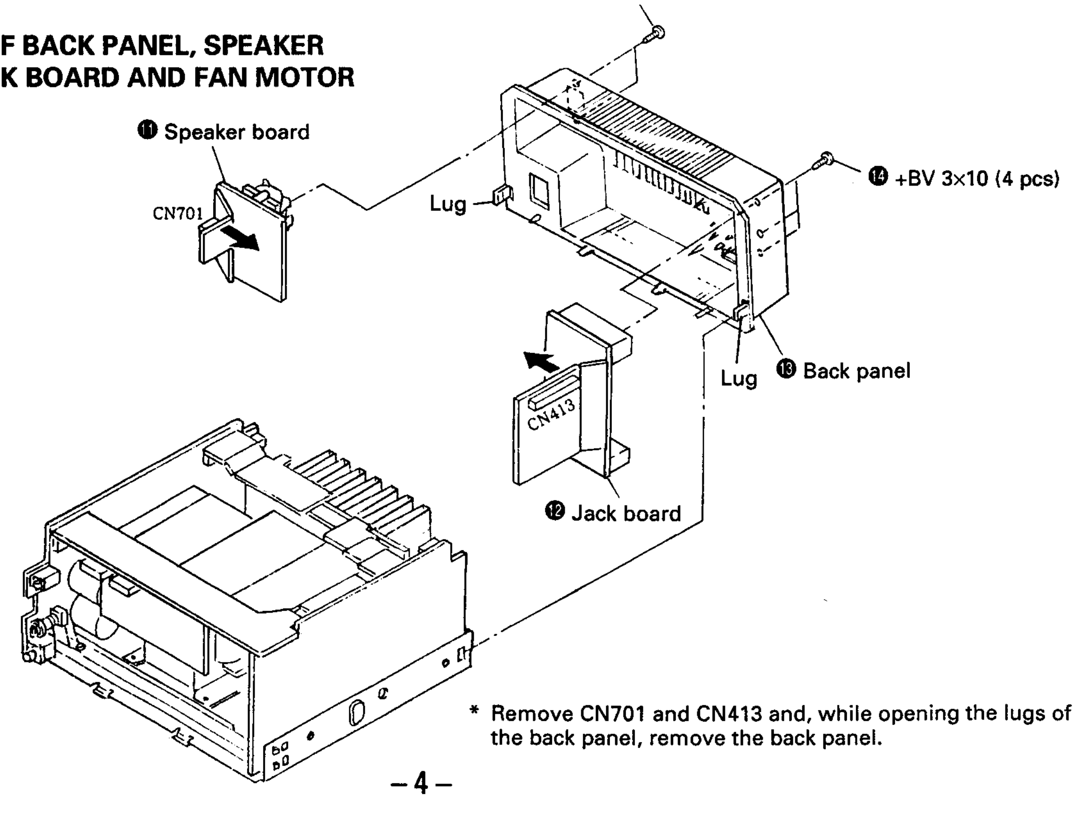
- **Remove the following parts with the numbers in that order of the numbers.**

2-1. REMOVAL OF UPPER CASE, FRONT PANEL AND PANEL BOARD


① +3×8 (2 pcs)
③ Upper case
② +3×8 (2 pcs)
⑨ +BV 2.6×8 (3 pcs)
CN404
CN405
Panel board
CN501
CN502
CN503
⑩ +BV 2.6×8 (5 pcs)
CN591
⑧ Volume board
Lug
Lug
⑤ Nut
④ Volume knob
⑦ Front panel
⑥ +BVTT 3×6 (2 pcs)

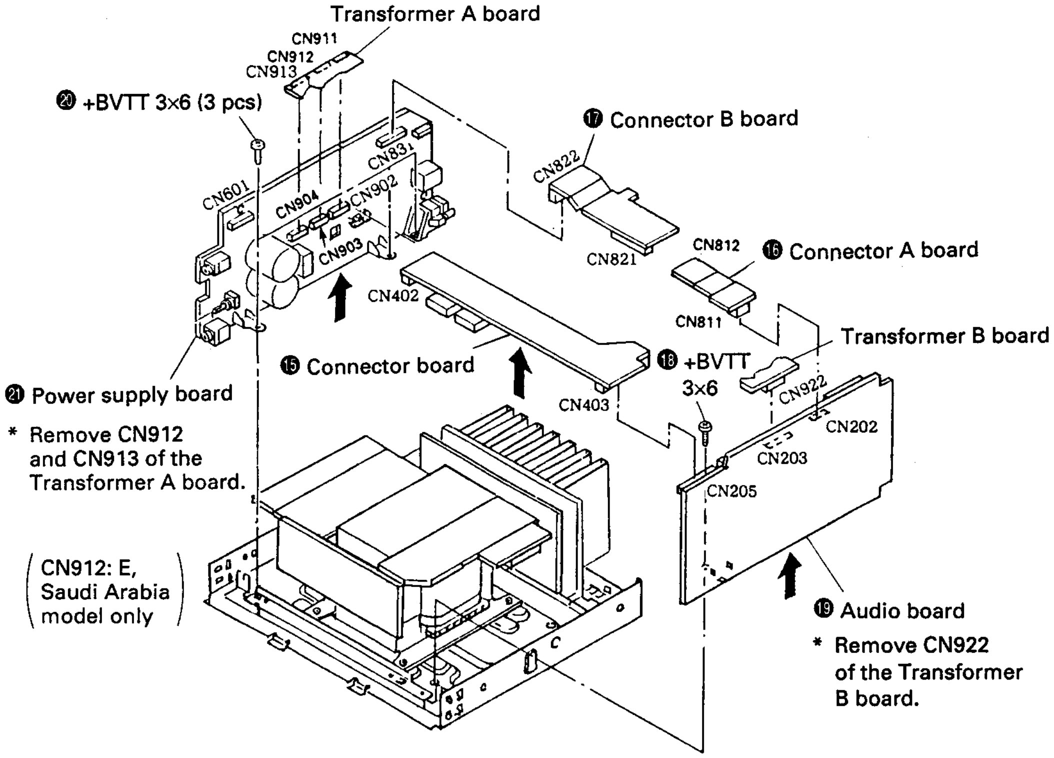
Open lugs in both sides and lower side.

2-2. REMOVAL OF BACK PANEL, SPEAKER BOARD, JACK BOARD AND FAN MOTOR


⑬ Back panel
⑪ Speaker board
CN701
Lug
⑭ +BV 3×10 (4 pcs)
Lug
⑬ Back panel
CN413
⑫ Jack board

* Remove CN701 and CN413 and, while opening the lugs of the back panel, remove the back panel.

2-3. REMOVAL OF AUDIO BOARD, POWER SUPPLY BOARD, CONNECTOR BOARD AND TRANSFORMER BOARD

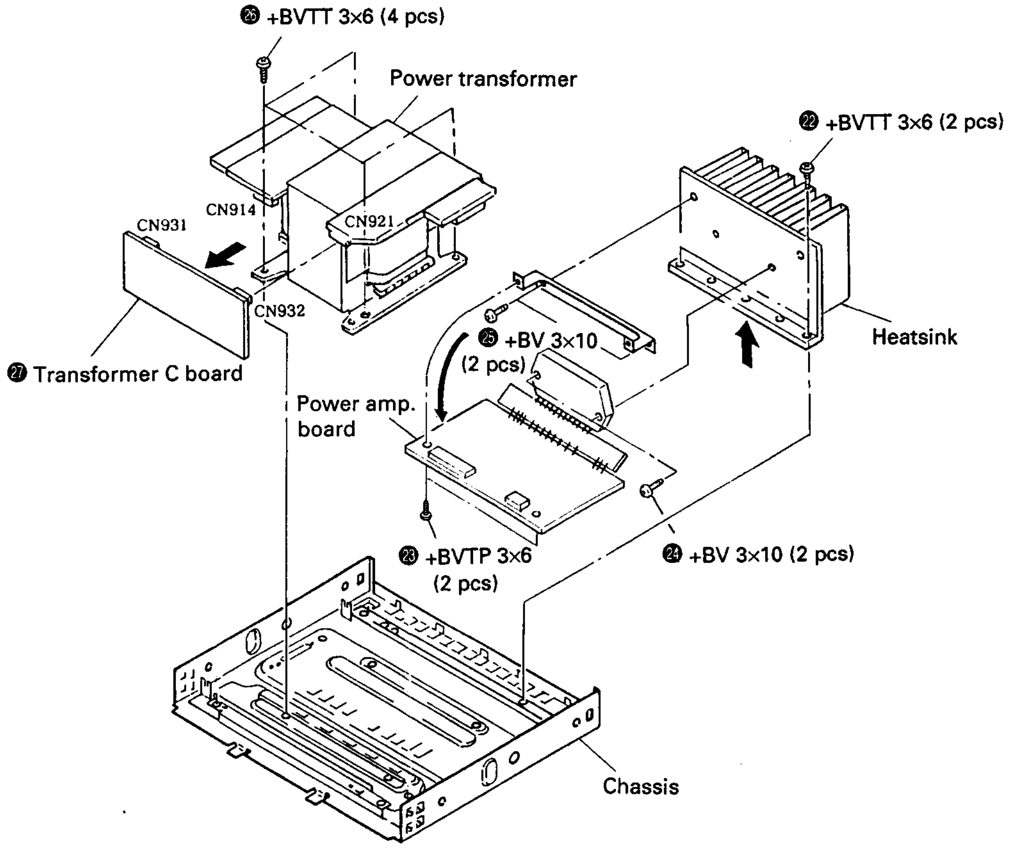

Transformer A board
CN911
CN912
CN913
⑳ +BVTT 3×6 (3 pcs)
⑰ Connector B board
CN831
CN822
CN601
CN904
CN902
CN903
CN821
CN812
⑯ Connector A board
CN402
CN811
Transformer B board
⑮ Connector board
⑱ +BVTT 3×6
CN922
㉑ Power supply board
CN403
CN202
CN203
CN205
⑲ Audio board

* Remove CN912 and CN913 of the Transformer A board.

(CN912: E, Saudi Arabia model only)

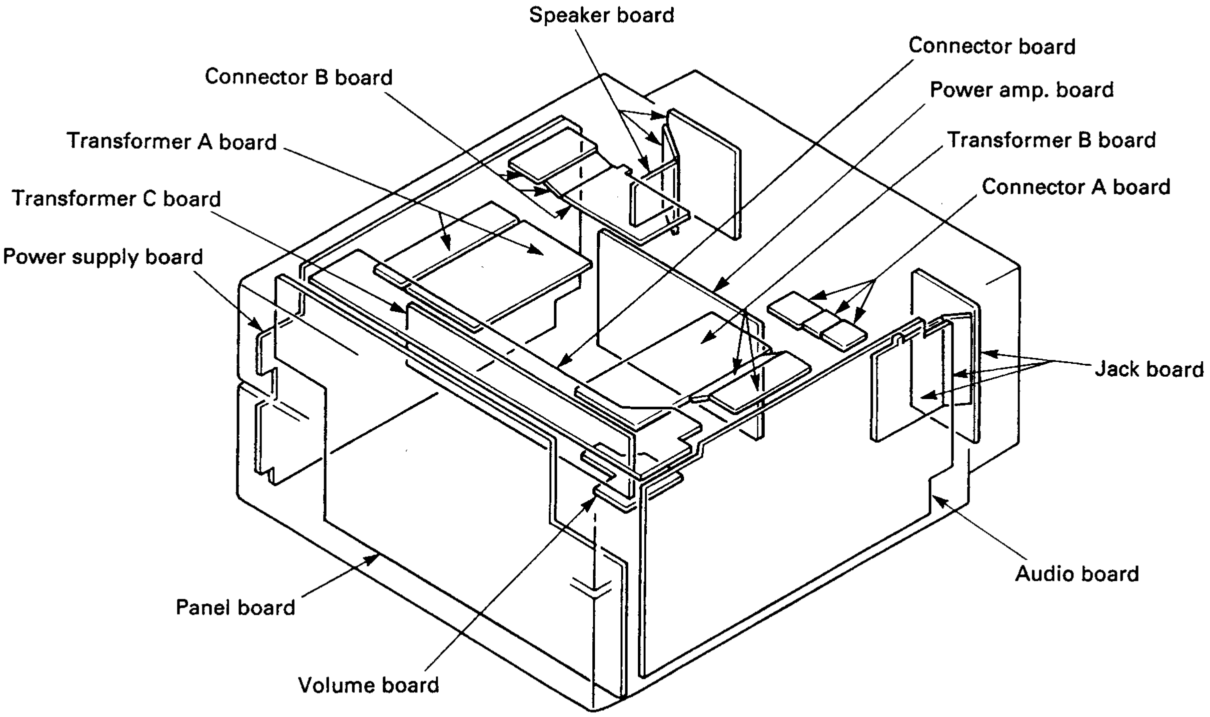
* Remove CN922 of the Transformer B board.

2-4. REMOVAL OF POWER TRANSFORMER, POWER AMP. BOARD, TRANSFORMER C BOARD AND HEATSINK


㉖ +BVTT 3×6 (4 pcs)
Power transformer
㉒ +BVTT 3×6 (2 pcs)
CN914
CN931
CN921
CN932
Heatsink
㉕ +BV 3×10 (2 pcs)
㉗ Transformer C board
Power amp. board
㉓ +BVTP 3×6 (2 pcs)
㉔ +BV 3×10 (2 pcs)
Chassis

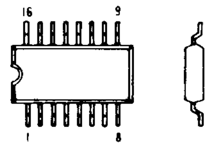
SECTION 3
DIAGRAMS

3-1. CIRCUIT BOARDS LOCATION

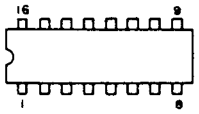

Speaker board
Connector board
Connector B board
Power amp. board
Transformer A board
Transformer B board
Transformer C board
Connector A board
Power supply board
Jack board
Audio board
Panel board
Volume board

3-2. SEMICONDUCTOR LEAD LAYOUTS

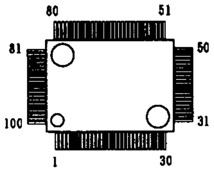
CD4052BCM
HD14053BFP



XR1091DCP



CXA1492Q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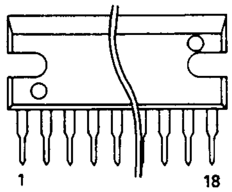
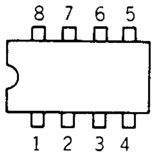
51
81
50
100
31
1
30

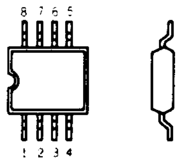
LA5603



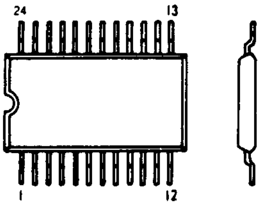
LB1639
X24C01P



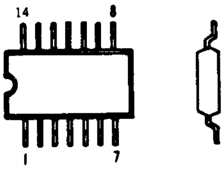
M5218AFP



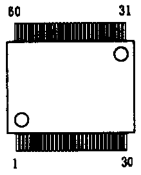
M66311FP



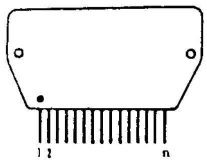
SN74HC04ANS



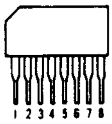
SN755703



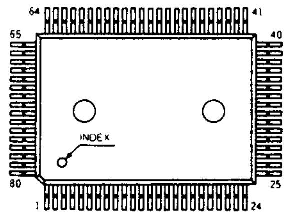
STK4142MK2
STK4152MK2



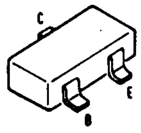
μPC1237HA



μPD78134-D29-3B9


64
41
65
40
INDEX
80
25
1
24

2SA1162-G
2SA1342
2SC3052-EF
2SC3396
2SC3624-L18



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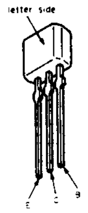
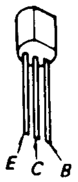

letter side
E
C
B

2SC1841-PAFAEA



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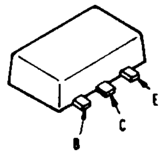

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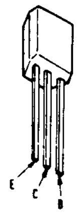

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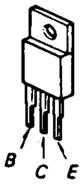
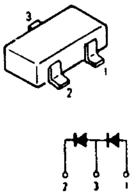
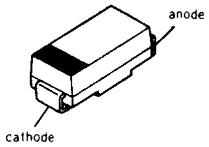


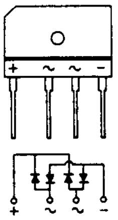
DCA010



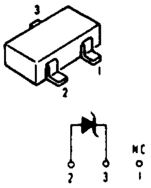
EC10DS2


anode
cathode

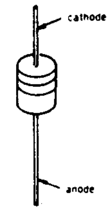
RBA-402



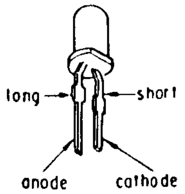
RD13M-B1
RD5.1M-B2
RD30M-B
RD36M-B



1SS120


cathode
anode

SEL2210S-CD


long
short
anode
cathode

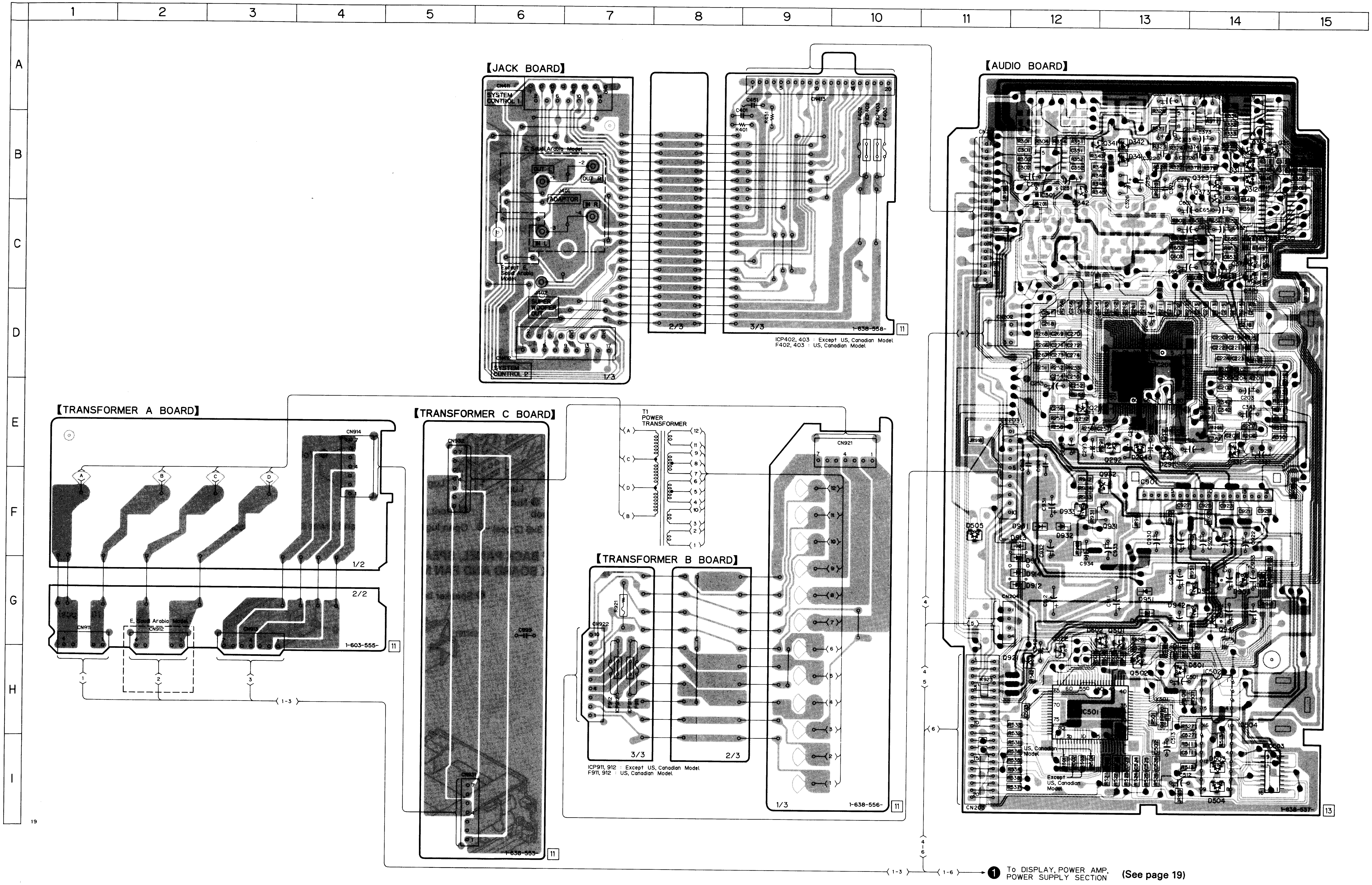
SEMICONDUCTOR LOCATION

- MAIN BOARD

Ref. No	Location	Ref. No	Location
D291	E-13	Q312	B-14
D294	E-13	Q321	C-14
D311	B-14	Q322	G-12
D312	B-14	Q323	B-14
D331	E-14	Q341	B-13
D341	B-13	Q342	B-12
D342	B-13	Q371	C-14
D501	H-14	Q373	B-14
D502	G-13	Q501	G-13
D503	I-14	Q502	H-13
D504	I-14	Q921	H-12
D505	F-11	Q931	F-13
D911	F-12	Q932	F-13
D912	G-12	Q941	G-14
D913	F-12	Q951	G-14
D914	G-12		
D931	F-12		
D932	F-12		
D933	F-12		
D941	G-13		
D942	G-13		
D951	G-13		
D952	G-14		
D953	G-14		
IC201	D-13		
IC301	B-12		
IC303	A-13		
IC304	A-14		
IC305	C-15		
IC501	H-12		
IC502	I-14		
IC503	H-14		
IC601	C-14		
IC901	F-13		
Q292	E-13		
Q293	E-12		
Q311	B-15		

Note:
- o——: indicated a lead wire mounted on the component si
- ■ : parts mounted on the conductor side.
- ● : Through hole.
- ▒ : Pattern from the side which enables seeing.
- ░ : Pattern of the rear side.

3-3. PRINTED WIRING BOARDS – MAIN SECTION –

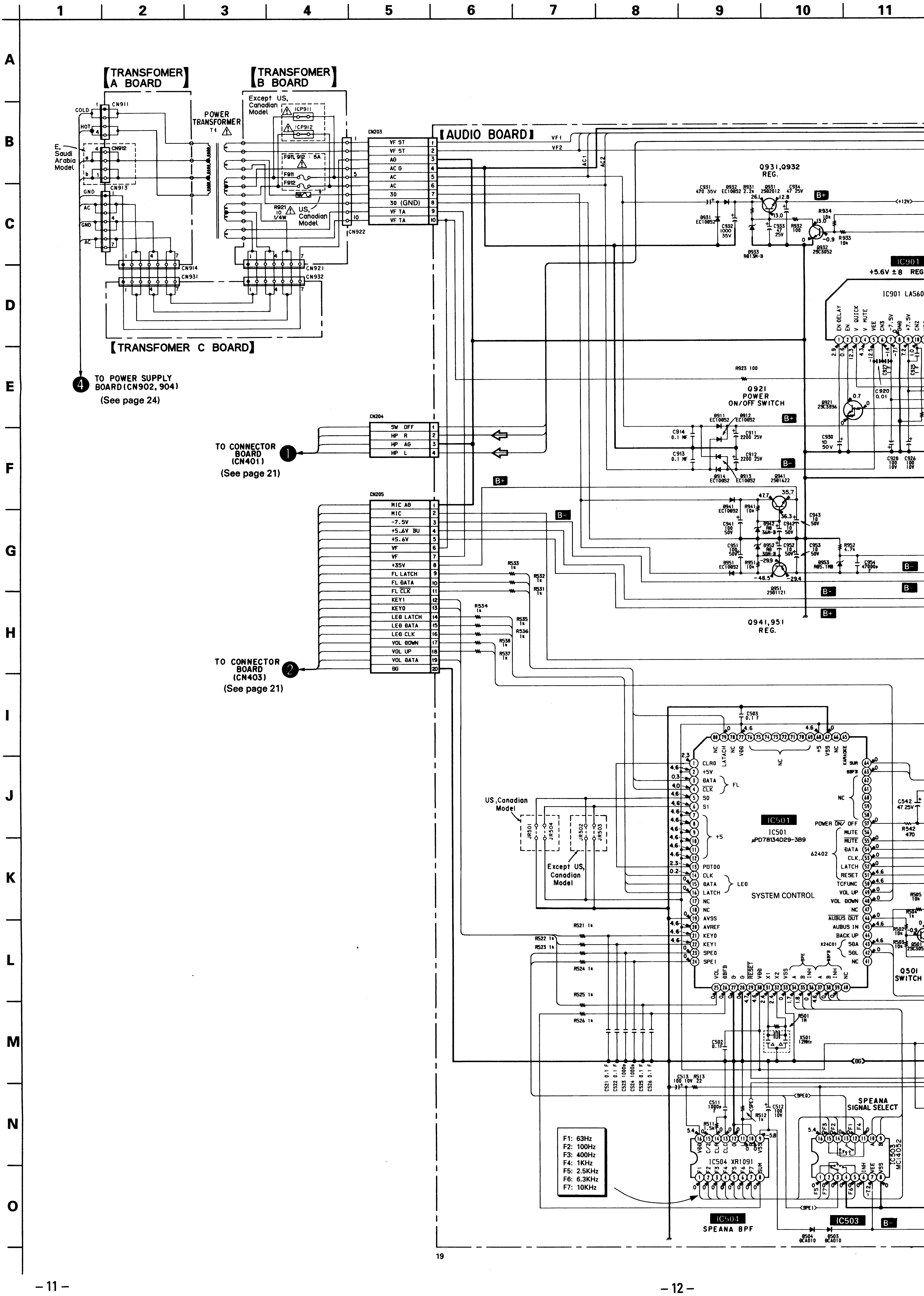

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
A
B
C
D
E
F
G
H
I
【JACK BOARD】
CN411
SYSTEM CONTROL 1
E, Saudi Arabia Model
OUT L
OUT R
J401
ADAPTOR
IN R
IN L
Except E, Saudi Arabia Model
J402
WOOFER OUT
CN412
SYSTEM CONTROL 2
1/3
2/3
3/3
CN413
C451
C401
R401
R451
F402
ICP402
ICP403
F403
1-638-558-
11
【AUDIO BOARD】
CN203
CN202
CN204
CN205
IC501
IC502
IC503
IC504
D504
D505
D601
Q501
Q502
US, Canadian Model
Except US, Canadian Model
1-638-537-
13
【TRANSFORMER A BOARD】
CN914
1/2
2/2
CN911
E, Saudi Arabia Model
CN912
CN913
1-603-555-
11
1
2
3
1-3
【TRANSFORMER C BOARD】
CN932
CN933
C935
1-638-555-
11
T1
POWER
TRANSFORMER
A
B
C
D
CN921
【TRANSFORMER B BOARD】
CN922
R921
1/3
2/3
3/3
1-638-556-
11
4
5
6
1-6

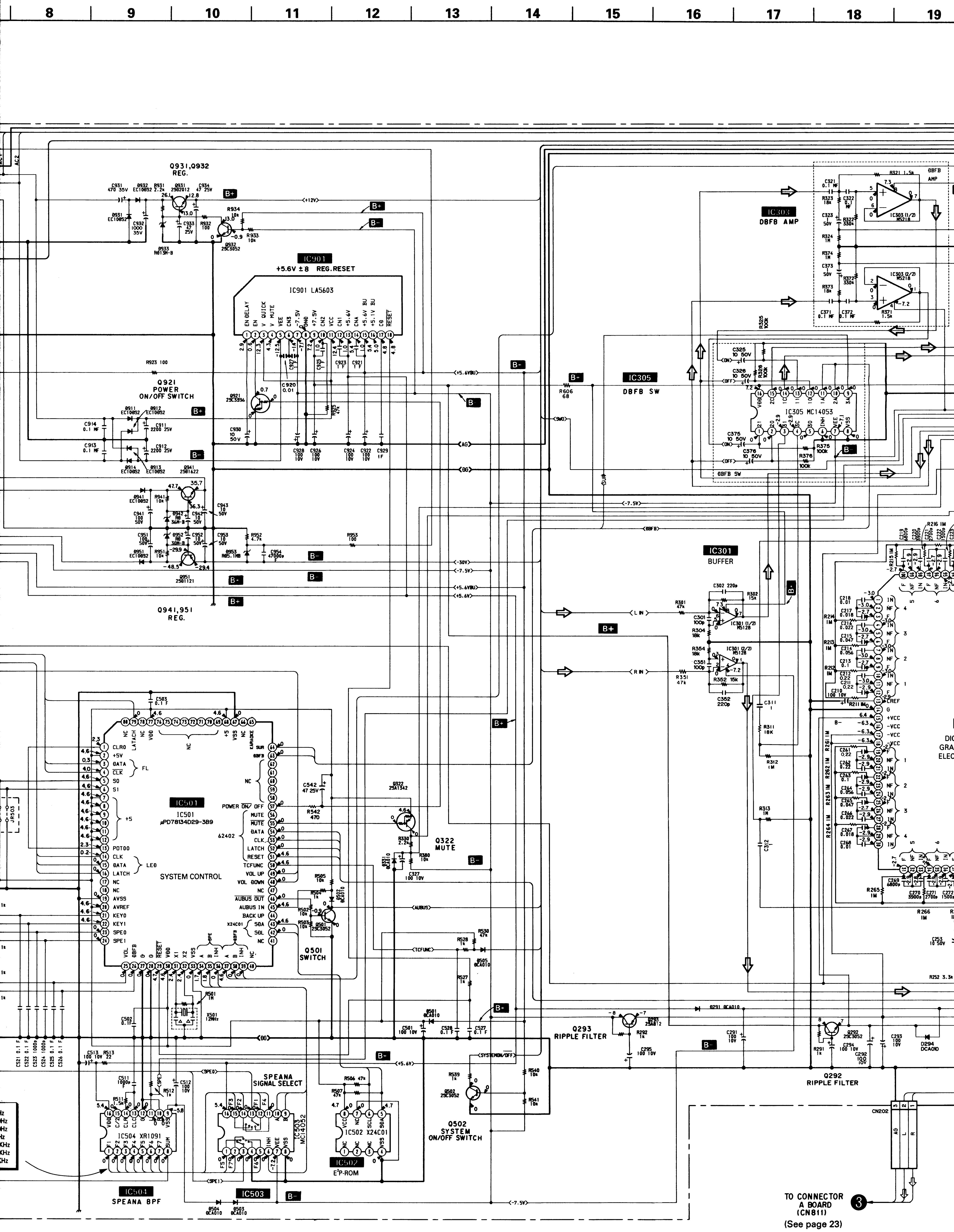
ICP402, 403 : Except US, Canadian Model
F402, 403 : US, Canadian Model

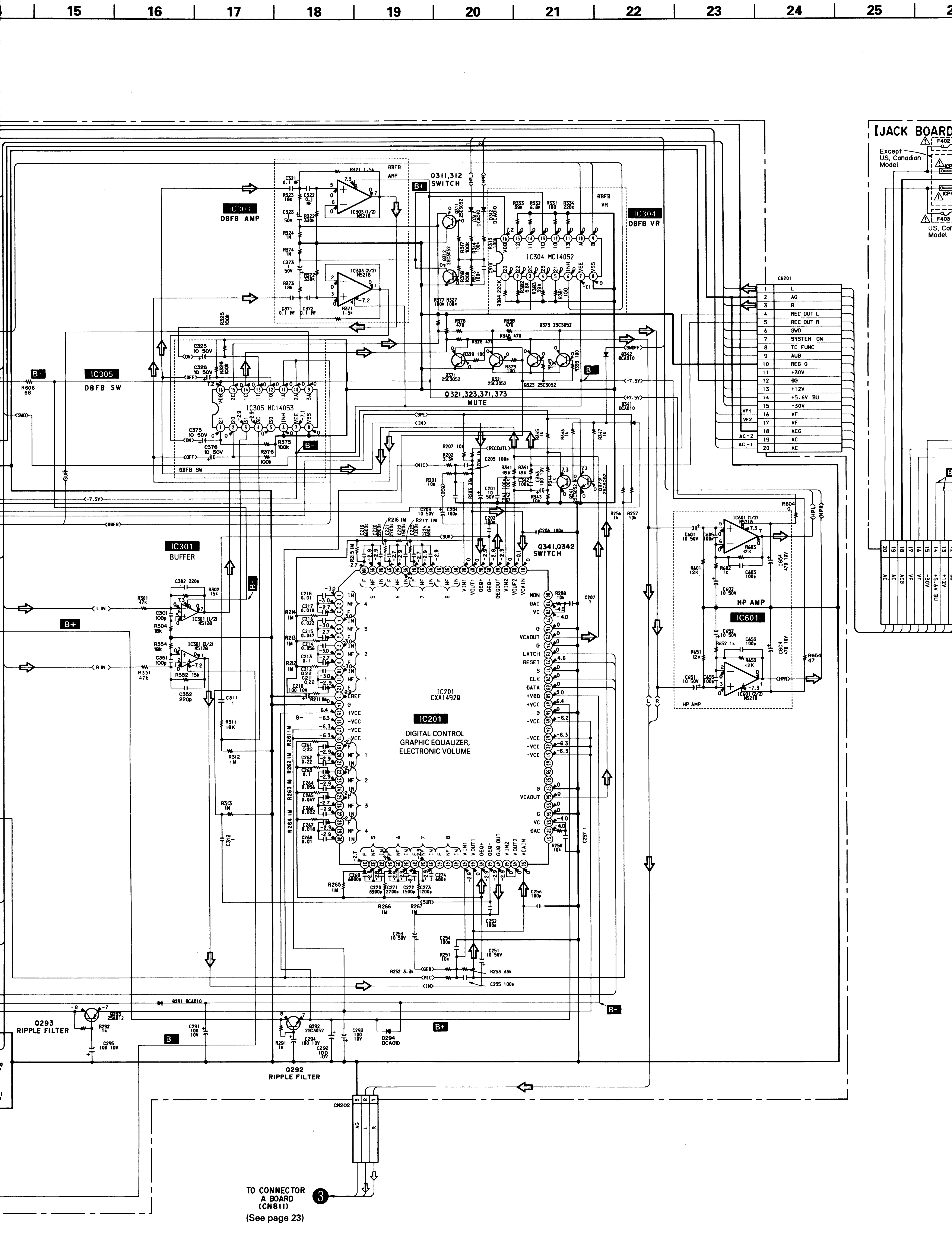
ICP911, 912 : Except US, Canadian Model
F911, 912 : US, Canadian Model

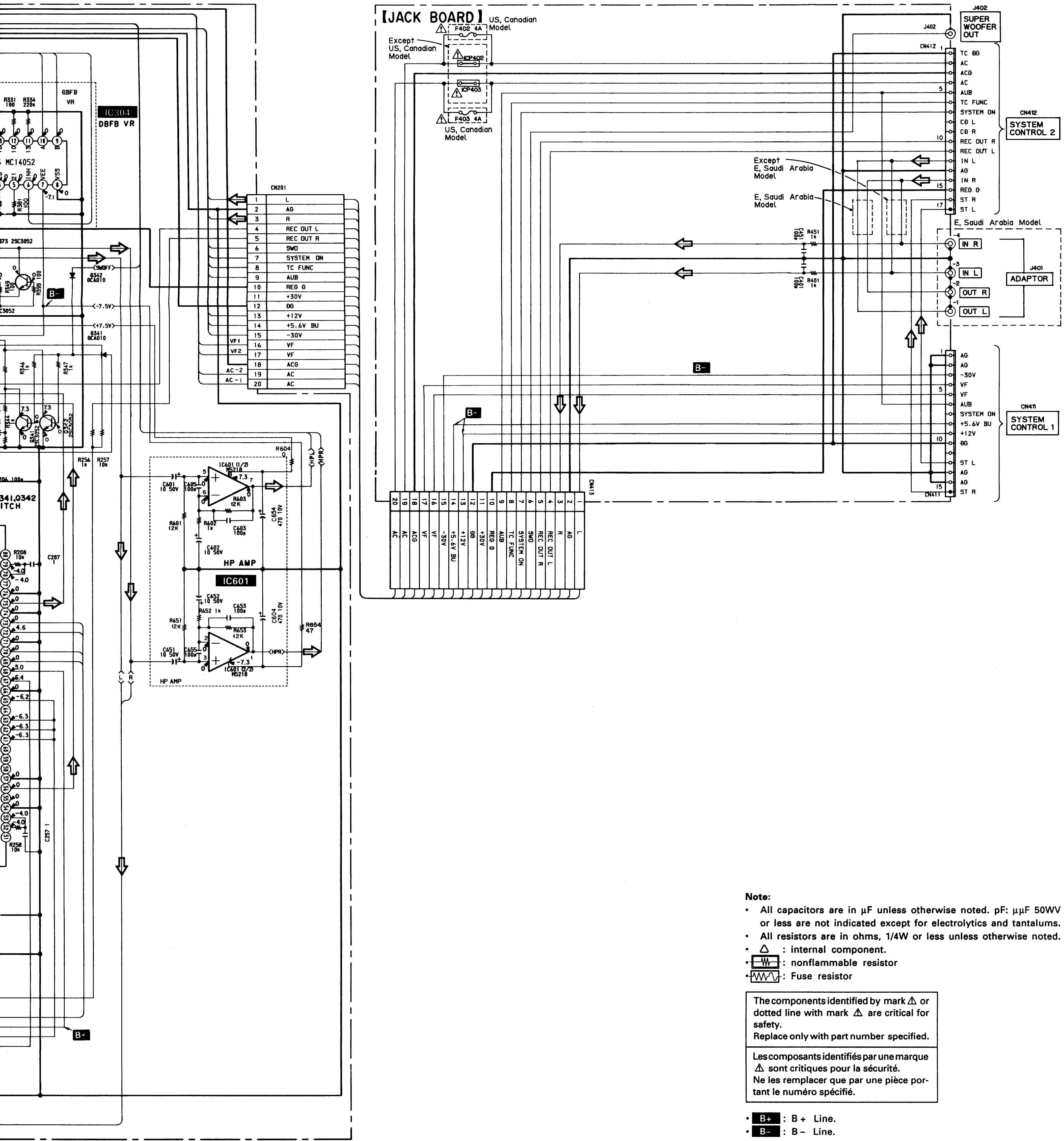
❶ To DISPLAY, POWER AMP, POWER SUPPLY SECTION (See page 19)

3-4. SCHEMATIC DIAGRAM - MAIN SECTION -


1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
TRANSFOMER A BOARD
TRANSFOMER B BOARD
TRANSFOMER C BOARD
CN911
CN912
CN913
CN914
CN931
CN921
CN922
CN932
COLD
HOT
E, Saudi Arabia Model
GND
AC
POWER TRANSFORMER T1
Except US, Canadian Model
ICP911
ICP912
F911, 912 5A
F911
F912
R921 10 1/4W
US, Canadian Model
CN203
VF ST
VF ST
AG
AC G
AC
AC
30
30 (GND)
VF TA
VF TA
AUDIO BOARD
VF1
VF2
AC1
AC2
Q931,Q932 REG.
C931 470 35V
D932 EC10052
R931 2.2k
Q931 2SD2012
C934 47 25V
C932 1000 35V
C933 47 25V
R932 100
D931 EC10052
D933 RD13M-B
R934 10k
R933 10k
Q932 2SC3052
B+
(+12V)
IC901
+5.6V ± 8 REG
IC901 LA560
EN DELAY
EN
V QUICK
V MUTE
VEE
CN3
-7.5V
GND
+7.5V
CN2
R923 100
Q921 POWER ON/OFF SWITCH
Q921 2SC3396
C920 0.01
C914 0.1 MF
C913 0.1 MF
D911 EC10052
D912 EC10052
C911 2200 25V
C912 2200 25V
D914 EC10052
D913 EC10052
Q941 2SB1622
C930 10 50V
C928 100 10V
C926 100 10V
4 TO POWER SUPPLY BOARD (CN902, 904)
(See page 24)
CN204
SW OFF
HP R
HP AG
HP L
1 TO CONNECTOR BOARD (CN401)
(See page 21)
CN205
MIC AG
MIC
-7.5V
+5.6V BU
+5.6V
VF
VF
+35V
FL LATCH
FL DATA
FL CLK
KEY1
KEY0
LED LATCH
LED DATA
LED CLK
VOL DOWN
VOL UP
VOL DATA
DG
2 TO CONNECTOR BOARD (CN403)
(See page 21)
B-
D941 EC10052
R941 10k
C941 100 50V
D942 RD 36M-B
C942 10 50V
C943 10 50V
C951 100 50V
D952 RD 30M-B
C952 10 50V
C953 10 50V
R952 4.7k
D953 RD5.1MB
C954 47000p
D951 EC10052
R951 10k
Q951 2SB1121
Q941,951 REG.
R533 1k
R532 1k
R531 1k
R534 1k
R535 1k
R536 1k
R538 1k
R537 1k
C503 0.1 F
IC501
IC501 µPD78134D029-3B9
SYSTEM CONTROL
CLRD
+5V
DATA
CLK
FL
S0
S1
+5
POTDO
CLK
DATA
LATCH
LED
NC
AVSS
AVREF
KEY0
KEY1
SPE0
SPE1
LATCH
VDD
+5
VSS
KARAOKE
SUR
DBFB
POWER ON/OFF
MUTE
MUTE
DATA
CLK
LATCH
RESET
62402
TCFUNC
VOL UP
VOL DOWN
AUBUS OUT
AUBUS IN
BACK UP
X24C01
SDA
SDL
VOL
DBFB
G
RESET
X1
X2
SPE
INH
US, Canadian Model
JR501
JR504
JR502
JR503
Except US, Canadian Model
C542 47 25V
R542 470
R505 10k
R504 1k
R502 10k
R503 10k
Q501 2SC305
Q501 SWITCH
R521 1k
R522 1k
R523 1k
R524 1k
R525 1k
R526 1k
C521 0.1 F
C522 0.1 F
C523 1000p
C524 1000p
C525 0.1 F
C526 0.1 F
R501 1M
X501 12MHz
C502 0.1F
(DG)
C513 100 10V
R513 22
(SPE0)
C511 1000p
R511 1.5k
R512 1k
C512 100 10V
SPEANA SIGNAL SELECT
IC504 XR1091
IC503 MC14032
(SPE1)
IC504
SPEANA BPF
IC503
D504 DCA010
D503 DCA010
F1: 63Hz
F2: 100Hz
F3: 400Hz
F4: 1KHz
F5: 2.5KHz
F6: 6.3KHz
F7: 10KHz
19


8
9
10
11
12
13
14
15
16
17
18
19
Q931,Q932 REG.
IC901
+5.6V ±8 REG.RESET
IC901 LA5603
EN DELAY
EN
V QUICK
V MUTE
VEE
CN3
-7.5V
GND
+7.5V
CN2
VCC
CN1
+5.6V
CNA
+5.6V BU
+5.1V BU
C0
RESET
Q921 POWER ON/OFF SWITCH
Q941,951 REG.
IC303 DBFB AMP
IC303 (1/2) M5218
IC303 (2/2) M5218
IC305 DBFB SW
IC305 MC14053
DBFB SW
IC301 BUFFER
IC301 (1/2) M5128
IC301 (2/2) M5128
B+
B-
<+12V>
<+5.6VBU>
<AG>
<DG>
<-7.5V>
<-30V>
<+5.6V>
<DBFB>
<SWD>
<L IN>
<R IN>
<AUBUS>
<TCFUNC>
<SYSTEMON/OFF>
<SPE0>
<SPE1>
IC501
IC501 μPD78134D29-389
SYSTEM CONTROL
CLR0
+5V
DATA
CLK
S0
S1
FL
PDT00
CLK
DATA
LATCH
LED
NC
AVSS
AVREF
KEY0
KEY1
SPE0
SPE1
POWER ON/OFF
MUTE
DATA
CLK
LATCH
RESET
62402
TCFUNC
VOL UP
VOL DOWN
AUBUS OUT
AUBUS IN
BACK UP
X24C01
SDA
SCL
Q322 2SA1342
Q322 MUTE
Q501 SWITCH
Q502 SYSTEM ON/OFF SWITCH
X501 12MHz
IC504 XR1091
IC504 SPEANA BPF
SPEANA SIGNAL SELECT
IC503 MC14052
IC503
IC502 X24C01
IC502 E²P-ROM
Q293 RIPPLE FILTER
Q292 RIPPLE FILTER
CN202
AG
L
R
DIGI GRA ELEC
TO CONNECTOR A BOARD (CN811) (See page 23)
3


15
16
17
18
19
20
21
22
23
24
25
IC303
DBFB AMP
IC303 (1/2) M5218
IC303 (2/2) M5218
Q311,312 SWITCH
IC304
DBFB VR
IC304 MC14052
IC305
DBFB SW
IC305 MC14053
DBFB SW
Q321,323,371,373
MUTE
Q341,Q342
SWITCH
IC301
BUFFER
IC301 (1/2) M5128
IC301 (2/2) M5128
IC201
CXA1492Q
DIGITAL CONTROL
GRAPHIC EQUALIZER,
ELECTRONIC VOLUME
IC601
HP AMP
IC601 (1/2) M5218
IC601 (2/2) M5218
CN201
1 L
2 AG
3 R
4 REC OUT L
5 REC OUT R
6 SWD
7 SYSTEM ON
8 TC FUNC
9 AUB
10 REG G
11 +30V
12 BG
13 +12V
14 +5.6V BU
15 -30V
16 VF
17 VF
18 ACG
19 AC
20 AC
Q293
RIPPLE FILTER
Q292
RIPPLE FILTER
D294 DCA010
CN202
AG
L
R
B+
B-
【JACK BOARD
Except US, Canadian Model
US, Canadian Model
F402
F403
TO CONNECTOR
A BOARD
(CN811)
(See page 23)


【JACK BOARD】
US, Canadian Model
F402 4A
Except US, Canadian Model
ICP402
ICP403
F403 4A
US, Canadian Model
J402
SUPER WOOFER OUT
CN412
TC ƟG
AC
ACG
AC
AUB
TC FUNC
SYSTEM ON
CƟ L
CƟ R
REC OUT R
REC OUT L
IN L
AG
IN R
REG G
ST R
ST L
SYSTEM CONTROL 2
Except E, Saudi Arabia Model
E, Saudi Arabia Model
R451 1k
R401 1k
E, Saudi Arabia Model
IN R
IN L
OUT R
OUT L
J401
ADAPTOR
AG
AG
-30V
VF
VF
AUB
SYSTEM ON
+5.6V BU
+12V
ƟG
ST L
AG
AG
ST R
CN411
SYSTEM CONTROL 1
CN413
B-
CN201
L
AG
R
REC OUT L
REC OUT R
SWO
SYSTEM ON
TC FUNC
AUB
REG G
+30V
ƟG
+12V
+5.6V BU
-30V
VF
VF
ACG
AC
AC
VF1
VF2
AC-2
AC-1
IC304
DBFB VR
MC14052
R331 100
R334 220k
DBFB VR
2SC3052
<SWOFF>
D342 8CA010
<-7.5V>
<+7.5V>
D341 8CA010
R346
R347 1k
R256 1k
R257 10k
341,0342
ITCH
R208 10k
C207 1
R258 10k
C257 1
B+
R604 0
<HPL>
<HPR>
IC601 (1/2) M5218
C401 10 50V
C605 100p
R603 12K
R601 12K
R602 1k
C603 100p
C654 470 10V
C602 10 50V
HP AMP
IC601
C652 10 50V
R652 1k
C653 100p
R651 12K
R653 12K
C604 470 10V
R654 47
C651 10 50V
C655 100p
IC601 (2/2) M5218
HP AMP
L
R

Note:

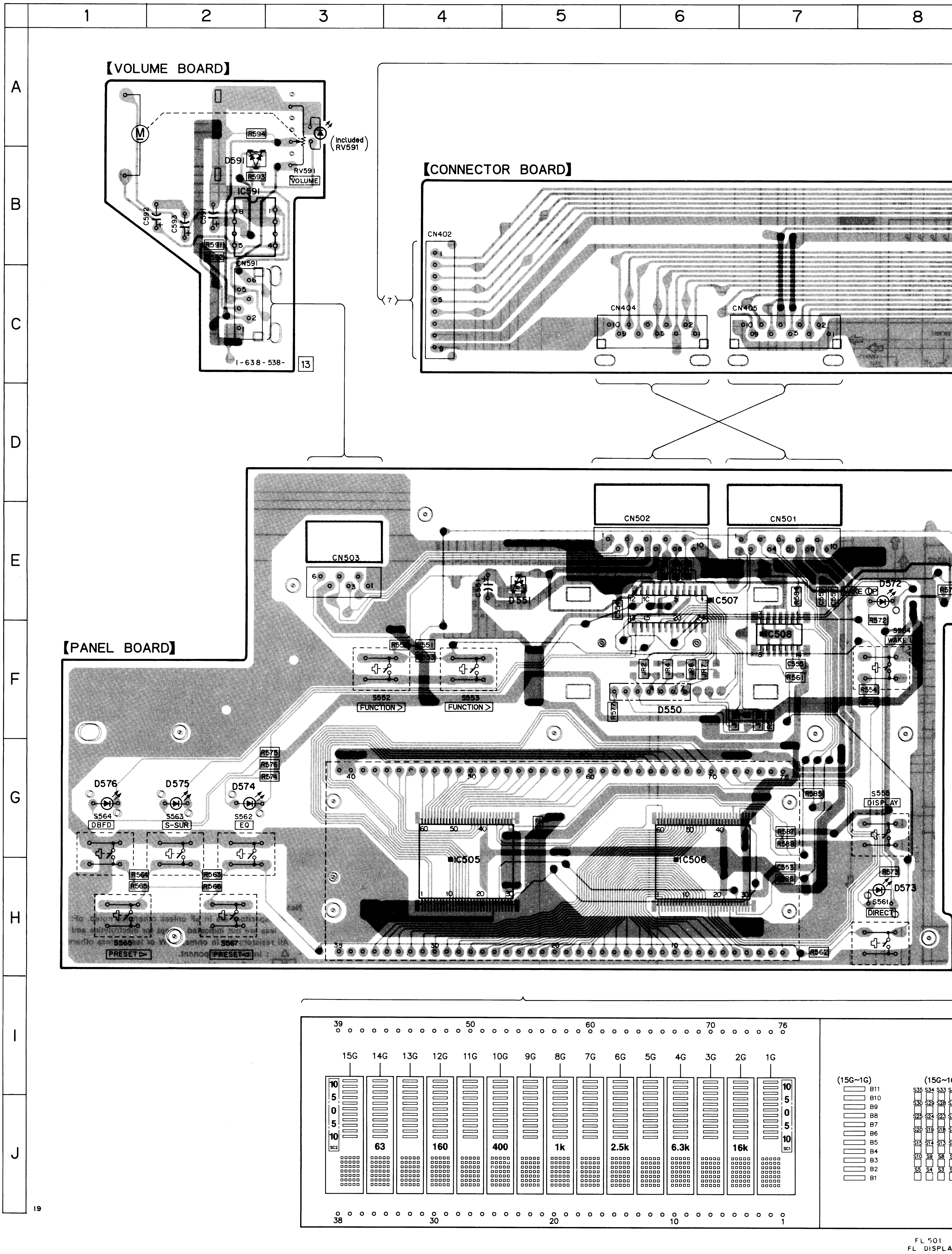
- All capacitors are in µF unless otherwise noted. pF: µµF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, 1/4W or less unless otherwise noted.
- △ : internal component.
- ▭ : nonflammable resistor
- ∿ : Fuse resistor

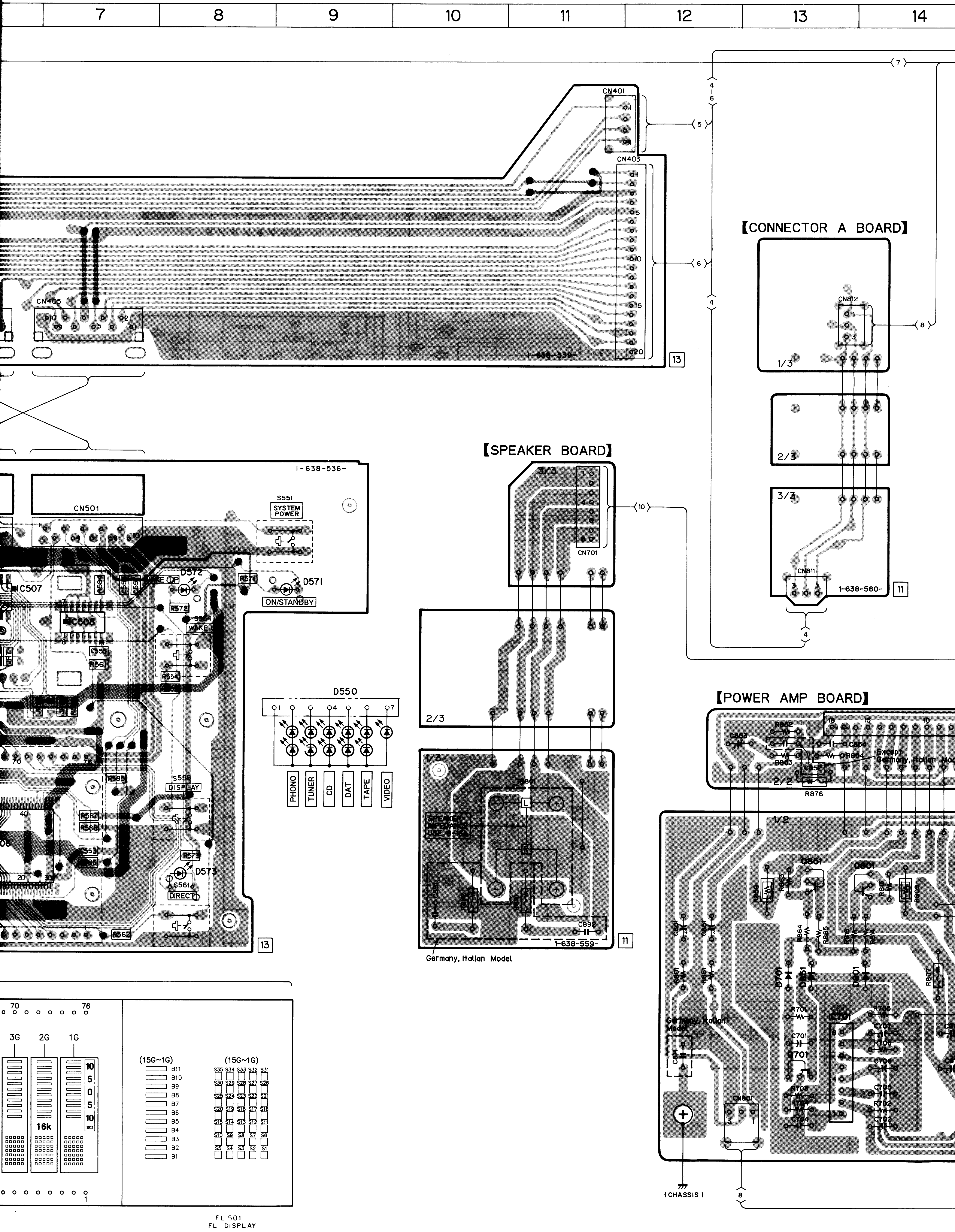
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

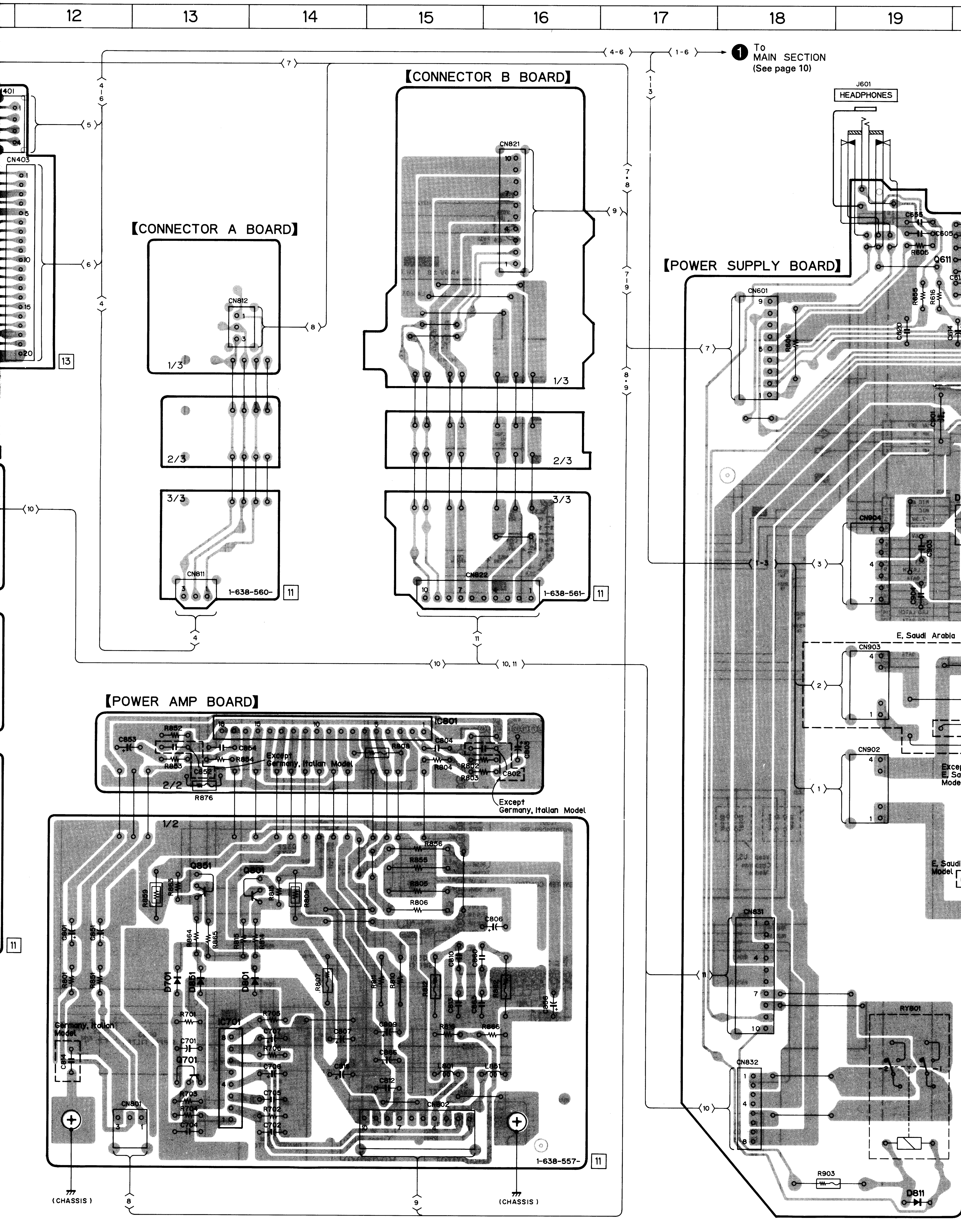
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

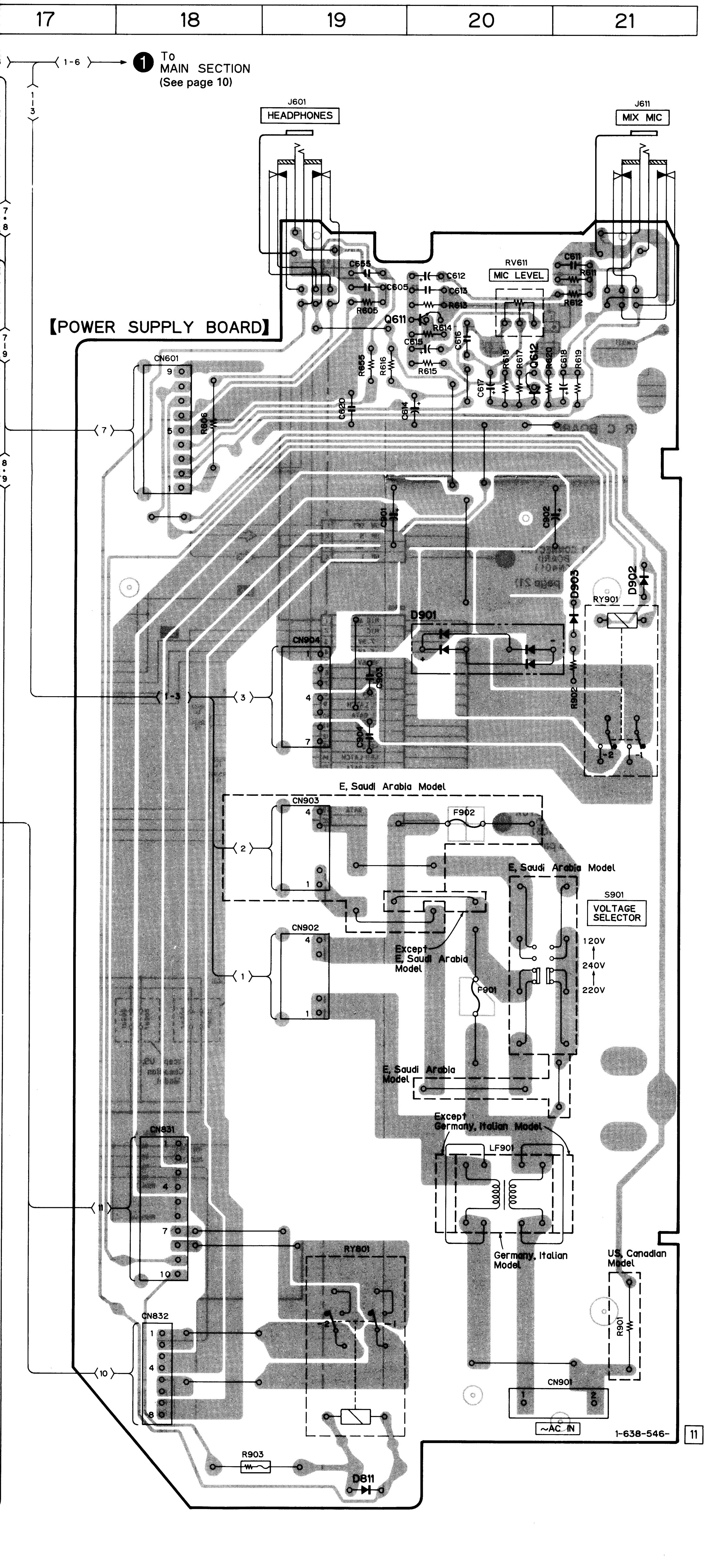
- B+ : B + Line.
- B- : B − Line.
- Voltage are dc with respect to ground under no-signal conditions.
- no mark : CD
- Voltages are taken with a VOM (input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path
  ⇨ : TUNER

3-5. PRINTED WIRING BOARDS – PANEL, POWER SECTION –


1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
I
J
【VOLUME BOARD】
M
R594
D591
R593
RV591
VOLUME
(Included RV591)
IC591
C592
C593
C591
R591
R592
CN591
1-638-538-
13
【CONNECTOR BOARD】
CN402
CN404
CN405
7
【PANEL BOARD】
CN503
CN502
CN501
D551
IC507
IC508
D572
WAKE UP
S554
R572
S552
FUNCTION >
S553
FUNCTION >
D550
R577
C555
R561
R554
R551
R553
R575
R576
R574
D576
D575
D574
S564
DBFD
S563
S-SUR
S562
EQ
R564
R565
R563
R566
S565
PRESET▷
S567
PRESET◁
IC505
IC506
R585
R587
R588
C553
R586
S555
DISPLAY
R573
D573
S561
DIRECT
R562
39
50
60
70
76
15G
14G
13G
12G
11G
10G
9G
8G
7G
6G
5G
4G
3G
2G
1G
10
5
0
5
10
63
160
400
1k
2.5k
6.3k
16k
SC2
SC1
38
30
20
10
1
(15G~1G)
B11
B10
B9
B8
B7
B6
B5
B4
B3
B2
B1
FL 501
FL DISPLA
19


7
8
9
10
11
12
13
14
CN401
CN403
CN405
1-638-539-
13
1-638-536-
CN501
S551
SYSTEM POWER
IC507
IC508
D572
D571
WAKE UP
R571
R572
ON/STANDBY
S554
R554
C555
R561
R585
S555
DISPLAY
R587
R588
C553
R586
R573
D573
S561
DIRECT
R562
13
D550
PHONO
TUNER
CD
DAT
TAPE
VIDEO
【SPEAKER BOARD】
3/3
CN701
2/3
1/3
TB801
L
R
SPEAKER IMPEDANCE USE 8-16Ω
C891
R892
R891
C892
1-638-559-
11
Germany, Italian Model
【CONNECTOR A BOARD】
CN812
1/3
2/3
3/3
CN811
1-638-560-
11
(7)
(5)
(6)
(8)
(10)
4
【POWER AMP BOARD】
C853
R852
R853
C852
C854
R854
Except Germany, Italian Mod
R876
2/2
1/2
Q851
Q801
R859
R865
R815
R809
C801
C851
R864
R814
R801
R851
D701
D851
D801
R807
R701
IC701
R705
C707
R706
C706
C701
Q701
C814
Germany, Italian Model
CN801
R703
R704
C704
C705
R702
C702
(CHASSIS)
8
70
76
3G
2G
1G
16k
(15G~1G)
B11
B10
B9
B8
B7
B6
B5
B4
B3
B2
B1
S35 S34 S33 S32 S31
S30 S29 S28 S27 S26
S25 S24 S23 S22 S21
S20 S19 S18 S17 S16
S15 S14 S13 S12 S11
S10 S9 S8 S7 S6
S5 S4 S3 S2 S1
FL 501
FL DISPLAY


12
13
14
15
16
17
18
19
To MAIN SECTION (See page 10)
【CONNECTOR A BOARD】
【CONNECTOR B BOARD】
【POWER SUPPLY BOARD】
【POWER AMP BOARD】
J601
HEADPHONES
CN403
CN812
CN811
CN821
CN822
CN601
CN904
CN903
CN902
CN831
CN832
CN801
CN802
IC801
IC701
Q851
Q801
Q701
Q611
D701
D851
D801
D811
RY801
R903
1/3
2/3
3/3
1/2
2/2
1-638-560-
1-638-561-
1-638-557-
E, Saudi Arabia
Except E, Saudi Arabia Model
E, Saudi Arabia Model
Except Germany, Italian Model
Germany, Italian Model
(CHASSIS)
(CHASSIS)


17
18
19
20
21
1-6
1
To
MAIN SECTION
(See page 10)
1-3
7
J601
HEADPHONES
J611
MIX MIC
RV611
MIC LEVEL
【POWER SUPPLY BOARD】
CN601
C655
C605
R605
Q611
C612
C613
R613
R614
C615
R615
C616
R655
R616
R618
R617
Q612
R620
C618
R619
C617
C611
R611
R612
C620
C614
R606
C901
C902
D901
D902
D903
RY901
R902
CN904
C903
C904
3
E, Saudi Arabia Model
CN903
2
F902
CN902
Except E, Saudi Arabia Model
F901
S901
VOLTAGE SELECTOR
120V
240V
220V
E, Saudi Arabia Model
CN831
11
LF901
Except Germany, Italian Model
Germany, Italian Model
US, Canadian Model
R901
CN901
~AC IN
RY801
CN832
10
R903
D811
1-638-546-
11

● SEMICONDUCTOR LOCATION

- PANEL/POWER AMP/POWER SUPPLY BOARD

Ref. No	Location	Ref. No	Location
D550	F-6	IC505	H-4
D551	E-5	IC506	H-6
D571	E-9	IC507	E-6
D572	E-8	IC508	F-7
D573	H-8	IC591	B-2
D574	G-2	IC701	I-13
D575	G-2	IC801	F-15
D576	G-1		
D591	B-2	Q611	B-19
D701	I-13	Q612	C-20
		Q701	I-13
D801	I-13	Q801	H-14
D811	J-19	Q851	H-13
D851	I-13		
D901	E-20		
D902	D-21		
D903	D-21		

Note:
- ○——: indicated a lead wire mounted on the component side.
- ■ : parts mounted on the conductor side.
- ● : Through hole.
- ▒ : Pattern from the side which enables seeing.
- ░ : Pattern of the rear side.

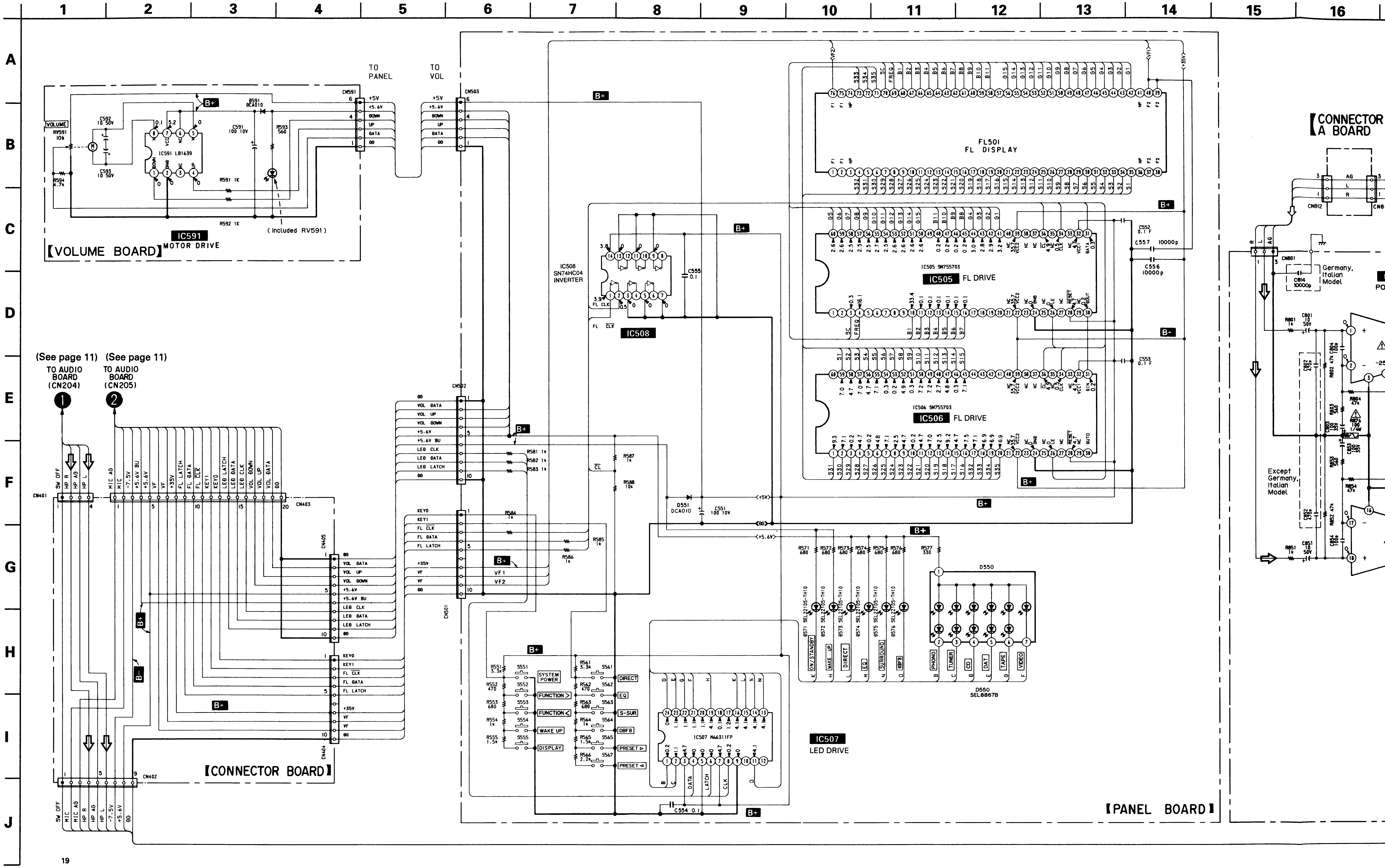
Note:
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, 1/4W or less unless otherwise noted.
- [-W-] : nonflammable resistor
- [WW] : Fuse resistor

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

- B+ : B + Line.
- B- : B - Line.
- Voltage are dc with respect to ground under no-signal conditions.
- no mark : CD
- Voltages are taken with a VOM (input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path
  ⇨ : TUNER

3-6. SCHEMATIC DIAGRAM – PANEL, POWER SECTION –


1
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6
7
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9
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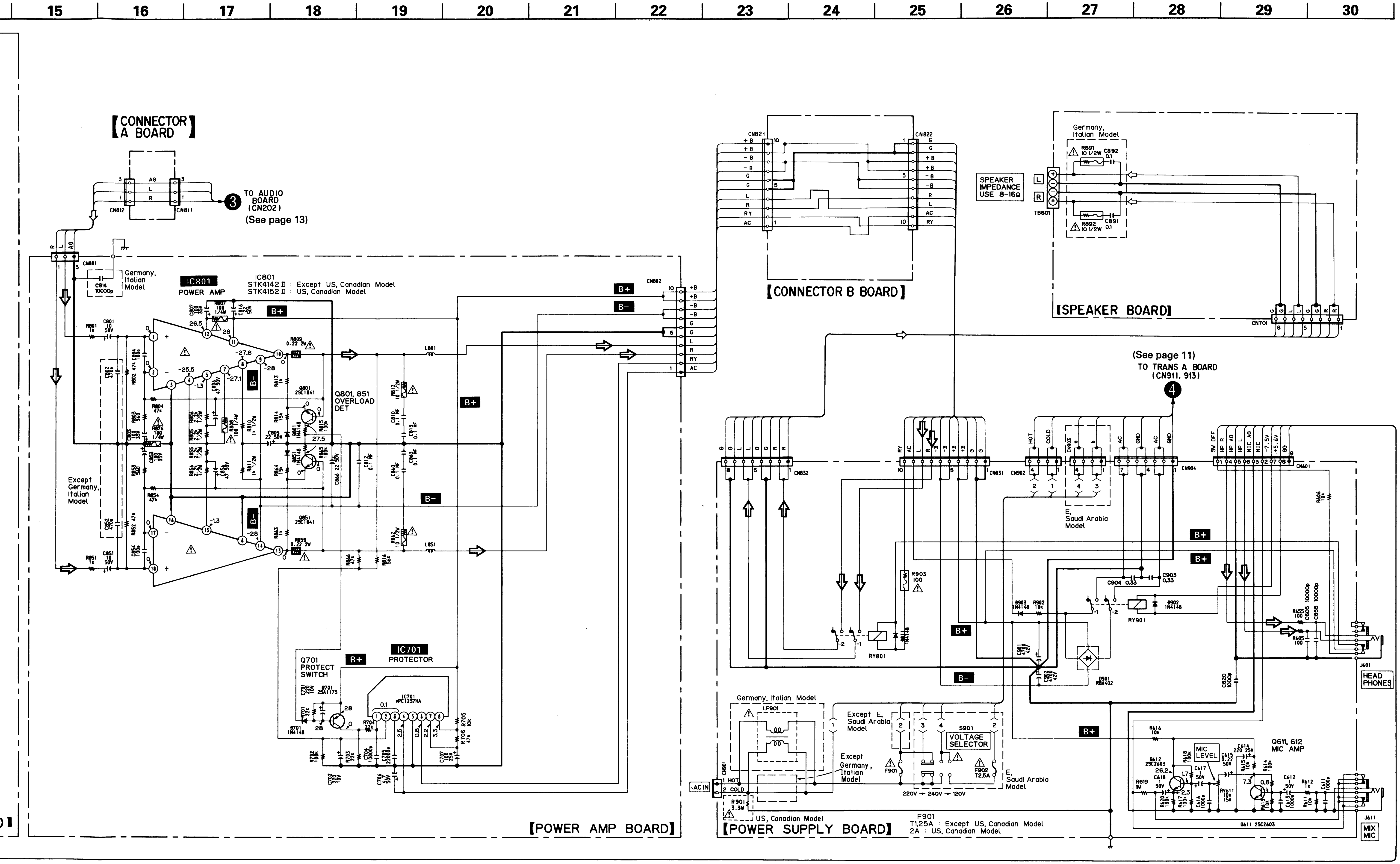
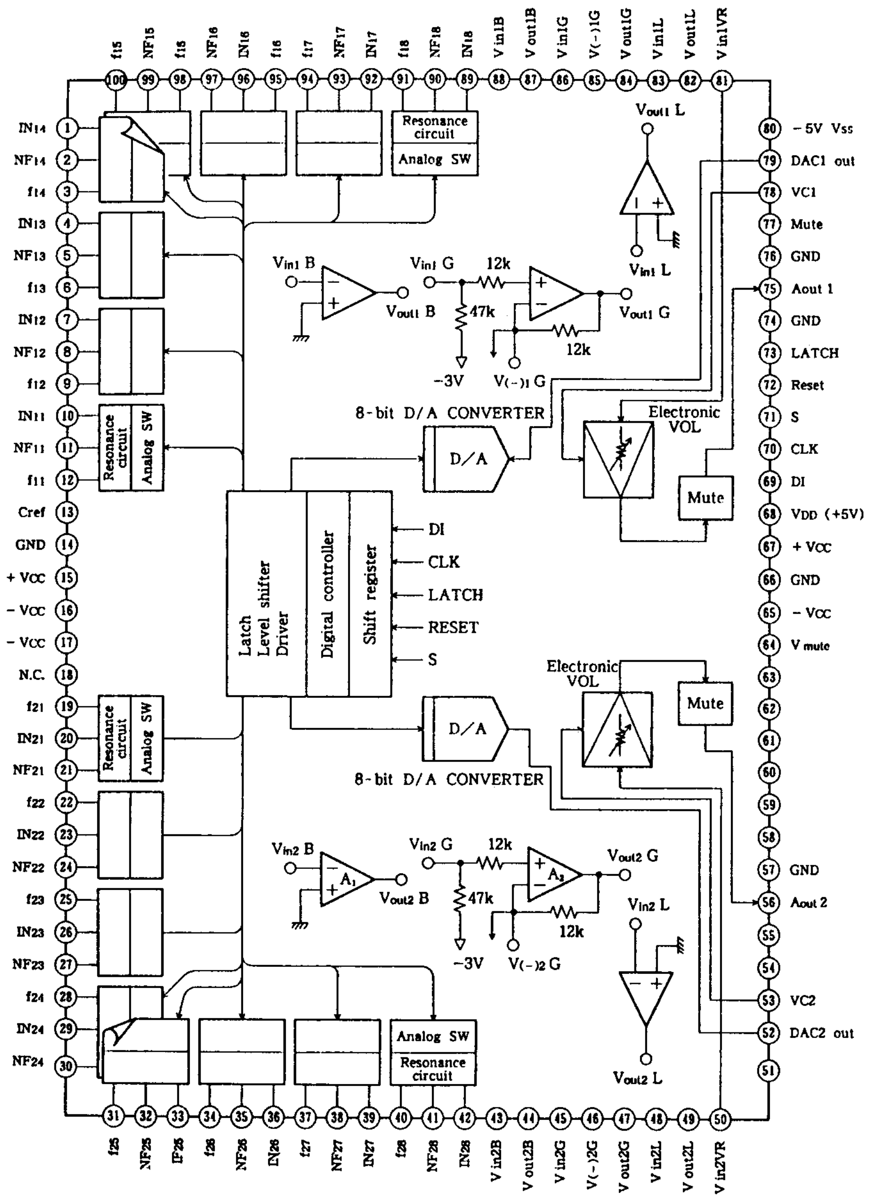
11
12
13
14
15
16
A
B
C
D
E
F
G
H
I
J
【VOLUME BOARD】
IC591 MOTOR DRIVE
IC591 LB1639
VOLUME RV591 10k
R594 4.7k
C592 10 50V
C593 10 50V
C591 100 10V
D591 DCA010
R593 560
R591 1k
R592 1k
(Included RV591)
CN591
TO PANEL
TO VOL
CN503
+5V
+5.6V
DOWN
UP
DATA
GND
B+
FL501 FL DISPLAY
IC505 SN755703
IC505 FL DRIVE
IC506 SN755703
IC506 FL DRIVE
IC508 SN74HC04 INVERTER
IC508
C555 0.1
C552 0.1 F
C557 10000p
C556 10000p
C553 0.1 F
FL CLK
CL
R587 1k
R588 10k
D551 DCA010
C551 100 10V
R581 1k
R582 1k
R583 1k
R584 1k
R585 1k
R586 1k
CN502
CN501
VOL DATA
VOL UP
VOL DOWN
+5.6V BU
LED CLK
LED DATA
LED LATCH
KEY0
KEY1
FL CLK
FL DATA
FL LATCH
+35V
VF
VF1
VF2
(See page 11)
TO AUDIO BOARD (CN204)
TO AUDIO BOARD (CN205)
①
②
CN401
CN403
CN405
CN404
CN402
SW OFF
HP R
HP AG
HP L
MIC AG
MIC
-7.5V
+5.6V BU
+5.6V
【CONNECTOR BOARD】
R571 680
R572 680
R573 680
R574 680
R575 680
R576 680
R577 330
D550
D571 SEL2210S-TH10
D572 SEL2210S-TH10
D573 SEL2210S-TH10
D574 SEL2210S-TH10
D575 SEL2210S-TH10
D576 SEL2210S-TH10
ON/STANDBY
WAKE UP
DIRECT
EQ
SURROUND
DBFB
PHONO
TUNER
CD
DAT
TAPE
VIDEO
D650 SEL8867B
IC507 LED DRIVE
IC507 M66311FP
DATA
LATCH
CLK
C554 0.1
R551 3.3k
R552 470
R553 680
R554 1k
R555 1.5k
S551
S552
S553
S554
S555
SYSTEM POWER
FUNCTION >
FUNCTION <
WAKE UP
DISPLAY
R561 3.3k
R562 470
R563 680
R564 1k
R565 1.5k
R566 2.2k
S561
S562
S563
S564
S565
S566
S567
DIRECT
EQ
S-SUR
DBFB
PRESET ▷
PRESET ◁
【PANEL BOARD】
【CONNECTOR A BOARD】
CN812
CN801
AG
L
R
Germany, Italian Model
C814 10000p
Except Germany, Italian Model
R801 1k
C801 10 50V
R804 47k
R803 560
R802 47k
C804 100p
C802 470p
C803 100 35V
R876 100 1/4W
R853 560
R854 47k
R852 47k
C852 470p
C854 100p
R851 1k
C851 10 50V
19

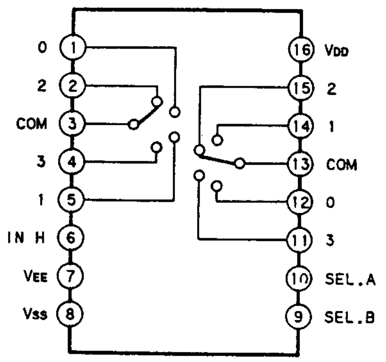

15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
【CONNECTOR A BOARD】
CN812
CN811
AG
L
R
TO AUDIO BOARD (CN202)
(See page 13)
CN801
Germany, Italian Model
C814 10000p
IC801
POWER AMP
IC801
STK4142 II : Except US, Canadian Model
STK4152 II : US, Canadian Model
B+
B-
CN802
+B
-B
G
L
R
RY
AC
Q801, 851
OVERLOAD DET
L801
L851
R809 0.22 2W
R859 0.22 2W
Q801 2SC1841
Q851 2SC1841
Except Germany, Italian Model
Q701
PROTECT SWITCH
Q701 2SA1175
D701 1N4148
IC701
PROTECTOR
IC701 μPC1237HA
【POWER AMP BOARD】
CN821
CN822
【CONNECTOR B BOARD】
SPEAKER IMPEDANCE USE 8-16Ω
Germany, Italian Model
R891 10 1/2W
C892 0.1
R892 10 1/2W
C891 0.1
TB801
L
R
【SPEAKER BOARD】
CN701
(See page 11)
TO TRANS A BOARD (CN911, 913)
CN832
CN831
CN902
CN903
CN904
CN601
HOT
COLD
E, Saudi Arabia Model
RY801
R903 100
D903 1N4148
R902 10k
D902 1N4148
RY901
C904 0.33
C903 0.33
C901 4700 42V
C902 4700 42V
D901 RBA402
C820 1000p
R655 100
R605 100
J601
HEAD PHONES
Germany, Italian Model
LF901
Except E, Saudi Arabia Model
S901
VOLTAGE SELECTOR
F901
F902 T2.5A
E, Saudi Arabia Model
Except Germany, Italian Model
220V → 240V → 120V
CN901
AC IN
1 HOT
2 COLD
R901 3.3M
US, Canadian Model
【POWER SUPPLY BOARD】
F901
T1.25A : Except US, Canadian Model
2A : US, Canadian Model
Q611, 612
MIC AMP
MIC LEVEL
Q612 2SC2603
RV611 10k 15A
Q611 2SC2603
J611
MIX MIC

3-7. IC BLOCK DIAGRAMS

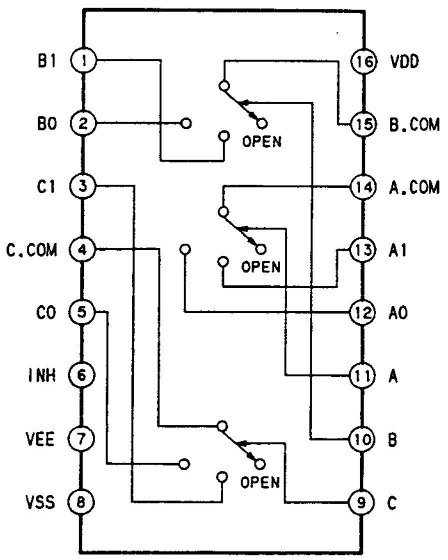
IC201 CXA1492Q


IN14 ① NF14 ② f14 ③ IN13 ④ NF13 ⑤ f13 ⑥ IN12 ⑦ NF12 ⑧ f12 ⑨ IN11 ⑩ NF11 ⑪ f11 ⑫ Cref ⑬ GND ⑭ +Vcc ⑮ -Vcc ⑯ -Vcc ⑰ N.C. ⑱ f21 ⑲ IN21 ⑳ NF21 ㉑ f22 ㉒ IN22 ㉓ NF22 ㉔ f23 ㉕ IN23 ㉖ NF23 ㉗ f24 ㉘ IN24 ㉙ NF24 ㉚
f25 ㉛ NF25 ㉜ IF25 ㉝ f26 ㉞ NF26 ㉟ IN26 ㊱ f27 ㊲ NF27 ㊳ IN27 ㊴ f28 ㊵ NF28 ㊶ IN28 ㊷ V in2B ㊸ V out2B ㊹ V in2G ㊺ V(-)2G ㊻ V out2G ㊼ V in2L ㊽ V out2L ㊾ V in2VR ㊿
(51) (52) DAC2 out (53) VC2 (54) (55) (56) Aout 2 (57) GND (58) (59) (60) (61) (62) (63) (64) V mute (65) -Vcc (66) GND (67) +Vcc (68) VDD (+5V) (69) DI (70) CLK (71) S (72) Reset (73) LATCH (74) GND (75) Aout 1 (76) GND (77) Mute (78) VC1 (79) DAC1 out (80) -5V Vss
(81) V in1VR (82) V out1L (83) V in1L (84) V out1G (85) V(-)1G (86) V in1G (87) V out1B (88) V in1B (89) IN18 (90) NF18 (91) f18 (92) IN17 (93) NF17 (94) f17 (95) f16 (96) IN16 (97) NF16 (98) f15 (99) NF15 (100) f15
Resonance circuit
Analog SW
Vout1 L
Vin1 L
Vin1 B
Vout1 B
Vin1 G
12k
47k
12k
Vout1 G
-3V
V(-)1 G
8-bit D/A CONVERTER
D/A
Electronic VOL
Mute
Latch
Level shifter
Driver
Digital controller
Shift register
DI
CLK
LATCH
RESET
S
Electronic VOL
Mute
D/A
8-bit D/A CONVERTER
Vin2 B
A1
Vout2 B
Vin2 G
12k
47k
A2
12k
Vout2 G
Vin2 L
-3V
V(-)2 G
Vout2 L
Analog SW
Resonance circuit

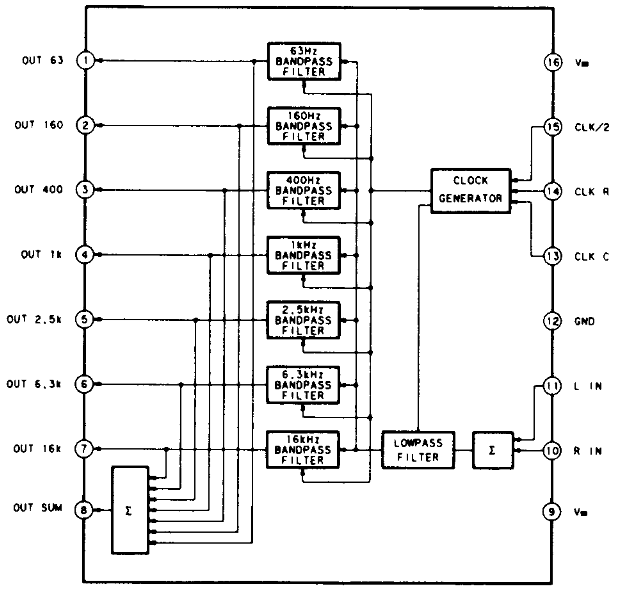
IC304, 503 MC14052BF


0 ①
2 ②
COM ③
3 ④
1 ⑤
INH ⑥
VEE ⑦
Vss ⑧
⑯ VDD
⑮ 2
⑭ 1
⑬ COM
⑫ 0
⑪ 3
⑩ SEL.A
⑨ SEL.B

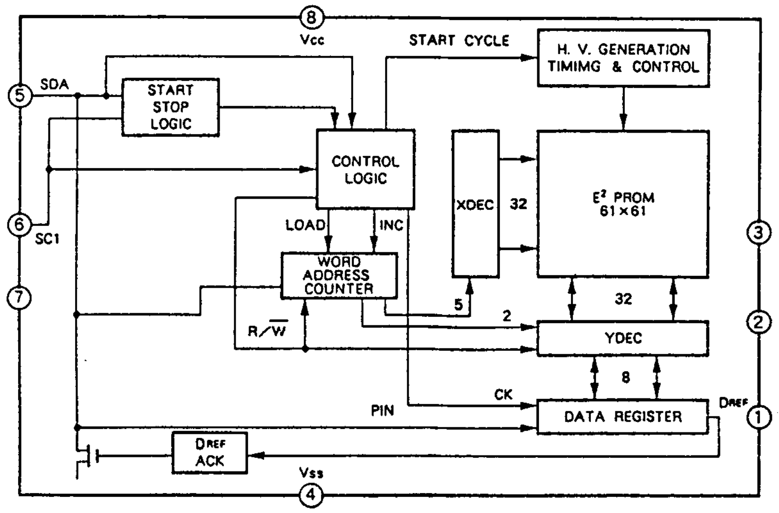
IC305 HD14053BFP


B1 ①
B0 ②
C1 ③
C.COM ④
C0 ⑤
INH ⑥
VEE ⑦
VSS ⑧
⑯ VDD
⑮ B.COM
⑭ A.COM
⑬ A1
⑫ A0
⑪ A
⑩ B
⑨ C
OPEN
OPEN
OPEN

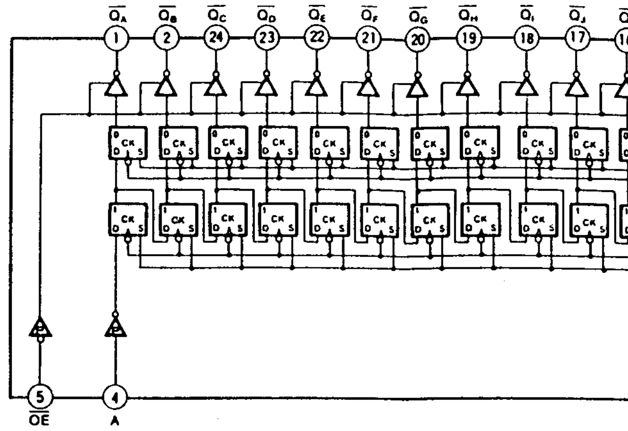
IC504 XR1091DCP


OUT 63 ①
OUT 160 ②
OUT 400 ③
OUT 1k ④
OUT 2.5k ⑤
OUT 6.3k ⑥
OUT 16k ⑦
OUT SUM ⑧
⑯ Vcc
⑮ CLK/2
⑭ CLK R
⑬ CLK C
⑫ GND
⑪ L IN
⑩ R IN
⑨ Vcc
63Hz BANDPASS FILTER
160Hz BANDPASS FILTER
400Hz BANDPASS FILTER
1kHz BANDPASS FILTER
2.5kHz BANDPASS FILTER
6.3kHz BANDPASS FILTER
16kHz BANDPASS FILTER
CLOCK GENERATOR
LOWPASS FILTER
Σ
Σ

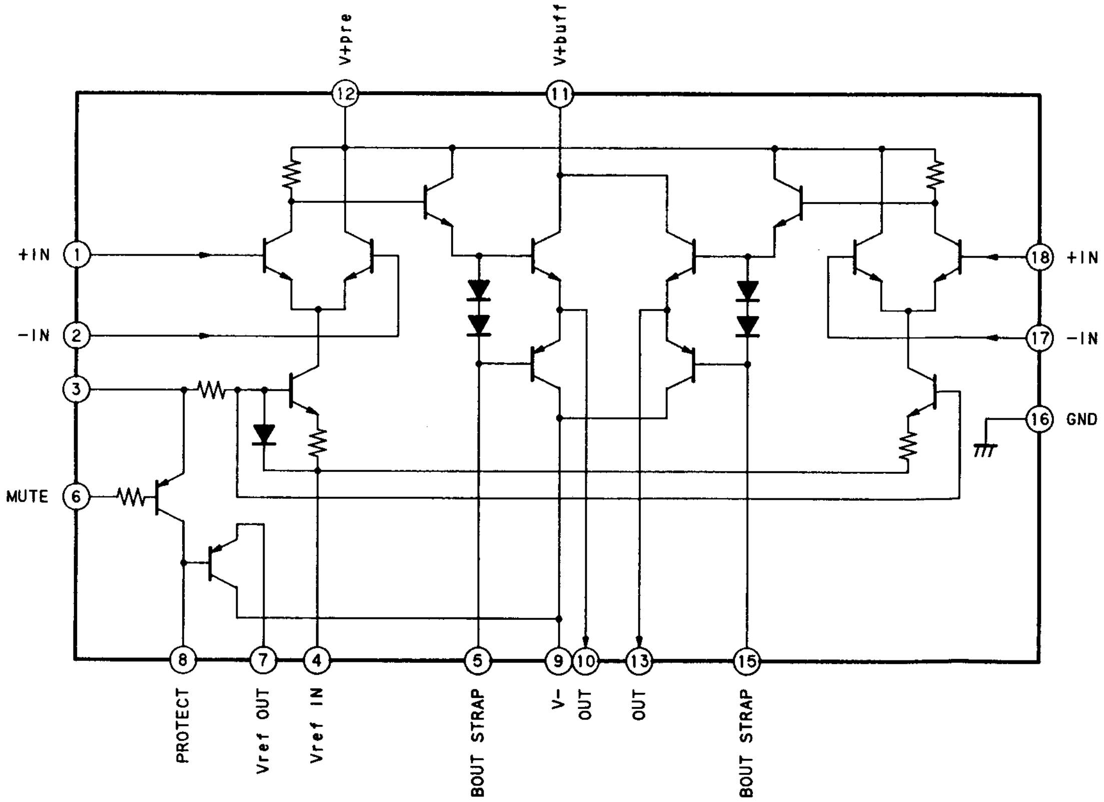
IC502 X24C01P


⑧ Vcc
⑤ SDA
⑥ SC1
⑦
④ Vss
③
②
① DREF
START STOP LOGIC
START CYCLE
H. V. GENERATION TIMIMG & CONTROL
CONTROL LOGIC
LOAD
INC
WORD ADDRESS COUNTER
R/W
XDEC
32
E² PROM 61×61
5
2
32
YDEC
8
PIN
CK
DATA REGISTER
DREF ACK

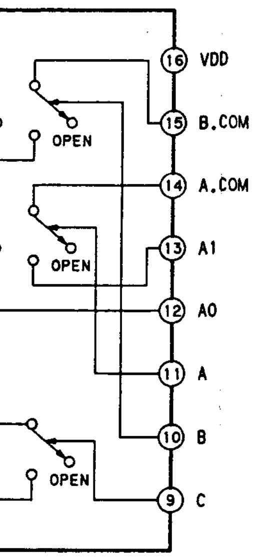
IC507 M66311FP


$\overline{Q_A}$ ①
$\overline{Q_B}$ ②
$\overline{Q_C}$ ㉔
$\overline{Q_D}$ ㉓
$\overline{Q_E}$ ㉒
$\overline{Q_F}$ ㉑
$\overline{Q_G}$ ⑳
$\overline{Q_H}$ ⑲
$\overline{Q_I}$ ⑱
$\overline{Q_J}$ ⑰
CK
D
S
⑤ $\overline{OE}$
④ A

IC801 STK4142II
STK4152II

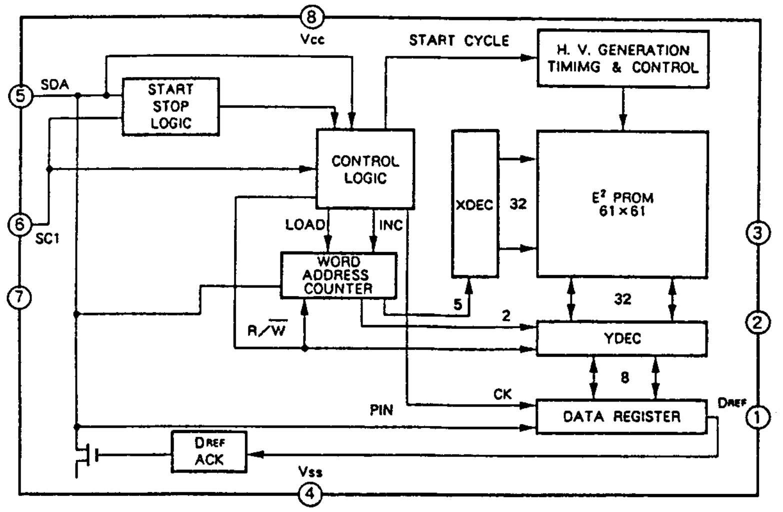

V+pre ⑫
V+buff ⑪
+IN ①
-IN ②
③
MUTE ⑥
⑱ +IN
⑰ -IN
⑯ GND
⑧ PROTECT
⑦ Vref OUT
④ Vref IN
⑤ BOUT STRAP
⑨ V-
⑩ OUT
⑬ OUT
⑮ BOUT STRAP

BFP



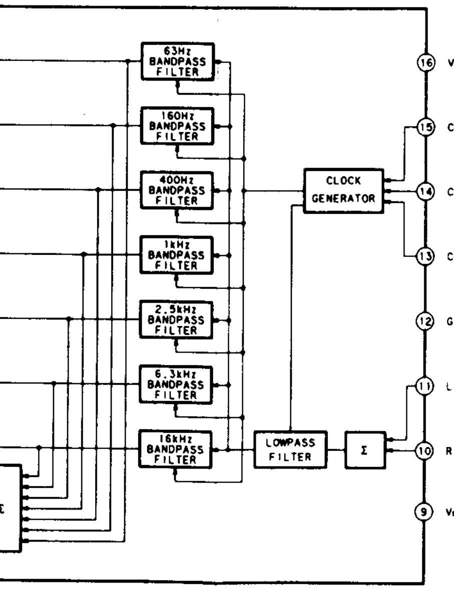
VDD
B.COM
A.COM
A1
A0
A
B
C
OPEN
OPEN
OPEN

IC502 X24C01P



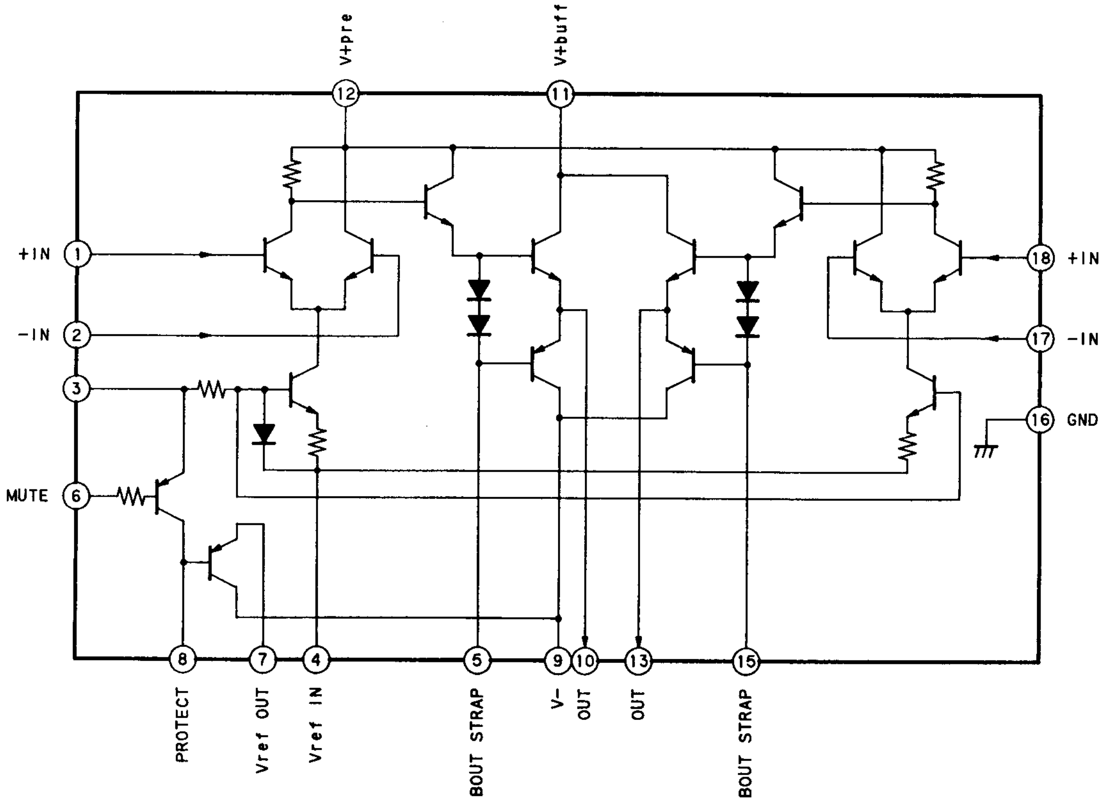
Vcc
START CYCLE
H. V. GENERATION TIMIMG & CONTROL
SDA
START STOP LOGIC
CONTROL LOGIC
XDEC
32
E² PROM 61×61
LOAD
INC
SC1
WORD ADDRESS COUNTER
R/W
5
2
32
YDEC
8
PIN
CK
DATA REGISTER
DREF
DREF ACK
Vss

091DCP



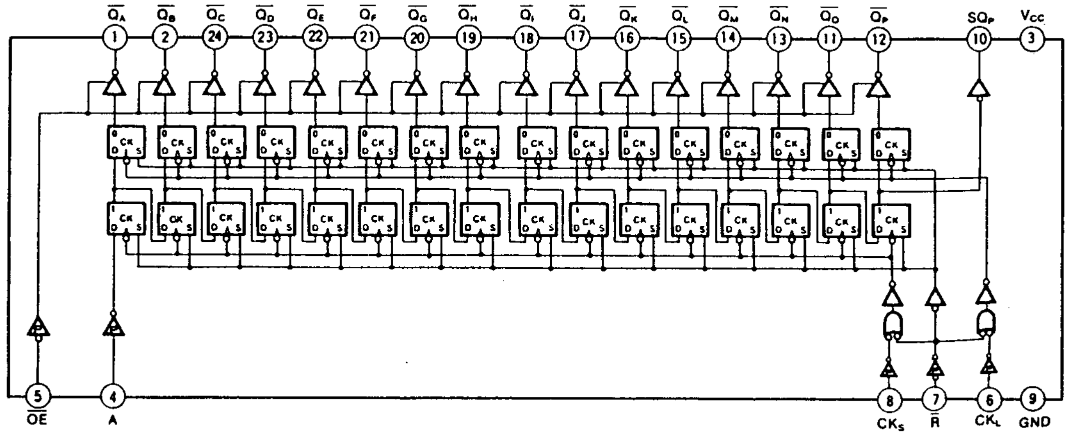
63Hz BANDPASS FILTER
160Hz BANDPASS FILTER
400Hz BANDPASS FILTER
1kHz BANDPASS FILTER
2.5kHz BANDPASS FILTER
6.3kHz BANDPASS FILTER
16kHz BANDPASS FILTER
CLOCK GENERATOR
LOWPASS FILTER
Σ
CLK/2
CLK R
CLK C
GND
L IN
R IN

IC801 STK4142Ⅱ
STK4152Ⅱ



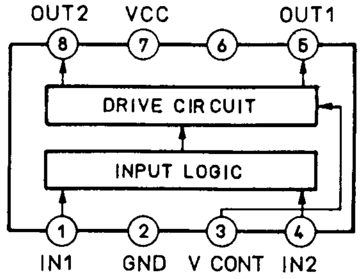
V+pre
V+buff
+IN
−IN
MUTE
+IN
−IN
GND
PROTECT
Vref OUT
Vref IN
BOUT STRAP
V−
OUT
OUT
BOUT STRAP

IC507 M66311FP



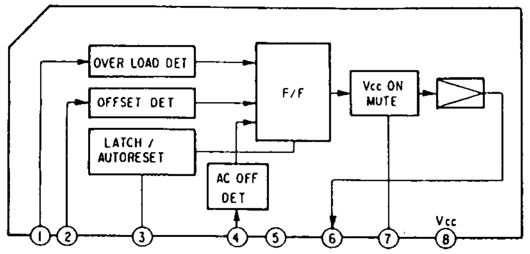
$\overline{Q_A}$
$\overline{Q_B}$
$\overline{Q_C}$
$\overline{Q_D}$
$\overline{Q_E}$
$\overline{Q_F}$
$\overline{Q_G}$
$\overline{Q_H}$
$\overline{Q_I}$
$\overline{Q_J}$
$\overline{Q_K}$
$\overline{Q_L}$
$\overline{Q_M}$
$\overline{Q_N}$
$\overline{Q_O}$
$\overline{Q_P}$
SQ_P
Vcc
$\overline{OE}$
A
CK_S
R
CK_L
GND

IC591 LB1639



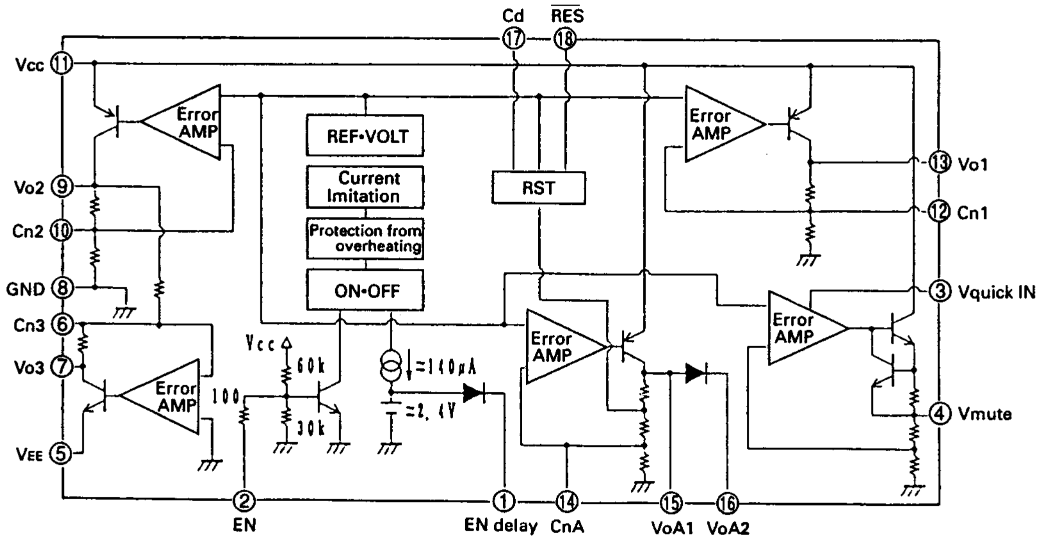
OUT2
VCC
OUT1
DRIVE CIRCUIT
INPUT LOGIC
IN1
GND
V CONT
IN2

IC701 μPC1237HA



OVER LOAD DET
OFFSET DET
LATCH / AUTORESET
F/F
Vcc ON MUTE
AC OFF DET
Vcc

IC901 LA5603



Cd
$\overline{RES}$
Vcc
Error AMP
REF•VOLT
Current limitation
Protection from overheating
ON•OFF
RST
Error AMP
Vo1
Vo2
Cn2
Cn1
GND
Cn3
Vo3
VEE
Vquick IN
Vmute
Error AMP
Error AMP
Error AMP
Vcc
60k
30k
100
=140μA
=2.4V
EN
EN delay
CnA
VoA1
VoA2

3-8. PIN FUNCTIONS OF IC501 (μPD 78134-D29-3B9)

According to keying in or remote control signal, it sets the Graphic equalizer electronic volume (IC201), DBFB, surround etc. and switches the LED and FL tube display and functions in the deck.

Pin No.	Pin name	I/O	Description
1	CLR	I	Timer pulse input
2	+ 5V	I	Not in use with the equipment (+5V)
3	DATA	O	Serial data output to the FL tube driver (IC505, 506)
4	CLK	O	Data transfer clock output to the FL tube driver (IC505, 506)
5	S0	I	Input port for model selection. Connected to +5V(except US and Canadian model) or GND(US or Canadian model) with the equipment.
6	S1	I	Input port for model selection. Connected to +5V(US or Canadian model) or GND(except US and Canadian model) with the equipment.
7-12	–	I	Not in use with the equipment (+5V)
13	POT00	O	Timer pulse output (about 400μSec)
14	CLK	O	Data transfer clock output to the LED driver (IC507)
15	DATA	O	Serial data output to LED driver (IC507)
16	LATCH	O	Data latch output to the LED driver (IC507)
17-18	PWM 0, PWM 1	O	Not in use with the equipment (open)
19	AVss	–	Analog system power terminal (GND)
20	AVref	I	Analog port reference voltage input (+5V)
21-22	KEY 0, 1	I	Key input (Analog)*1
23-24	SPE 0, 1	I	Spectrum analysis data input (analog)
25	VOL	I	Volume position data input (analog)
26	DBFB	I	DBFB data input
27-28	-	I	Not in use with the equipment (GND)
29	RESET	I	System reset input. "L" : reset
30	VDD	–	Power terminal (+5V)
31-32	X2, X1	–	Crystal connection terminal for system clock oscillation
33	VSS	–	Power terminal (GND)
34	A	O	Spectrum analysis data input switch A
35	B	O	Spectrum analysis data input switch B
36	INH	O	Spectrum analysis data input switch inhibit
37	A	O	DBFB output switch A } *2
38	B	O	DBFB output switch B } *2
39	INH	O	DBFB output switch inhibit } *2
40-41	-		Not in use with the equipment (open)
42	SCL	O	Clock output to EEP-ROM (IC502)
43	SDA	I/O	Data input/output (user preset memory data, etc.) with EEP-ROM (IC502)
44	-	O	Not in use with the equipment (open)
45	AU BUS IN	I	Audio bus input
46	AU BUS OUT	O	Audio bus output (tuner power ON/OFF and instruction to the function switch microcomputer in the deck)
47	–	O	Not in use with the equipment (open)
48	VOL DOWN	O	DOWN signal output of the volume motor (RV591)
49	VOL UP	O	UP signal output of the volume motor (RV591)
50	TC FUNC	I	Request of audio bus (FUNCTION data) from the function switch microcomputer in the deck (TC-H2600)

Pin No.	Pin name	I/O	Description
51	RESET	O	Reset output to the Graphic equalizer electronic volume (IC201) "L" : reset
52	LATCH	O	Data latch output to the Graphic equalizer electronic volume (IC201)
53	CLK	O	Data transfer clock output to the Graphic equalizer electronic volume (IC201)
54	DATA	O	Serial data output to the Graphic equalizer electronic volume (IC201)
55	MUTE	O	Mute reverse output
56	MUTE	O	Mute output
57	POWER ON/OFF	O	Power (IC901) output control. "L" : Power ON
58-62	–	O	Not in use with the equipment (open)
63	DBFB	O	DBFB ON/OFF (IC305) controller output. "H" : ON, "L" : OFF
64	SUR	O	Surround ON/OFF (IC302 1/2) controller output. "H" : surround ON
65	KARAOKE	O	Not in use with the equipment (open)
66	ASTB/CLO	O	Not in use with the equipment (open)
67	VSS	–	Power terminal (GND)
68	EA	I	Not in use with the equipment (open)
69-76	–	O	Not in use with the equipment (open)
77	VDD	–	Power terminal (+5V)
78	–	O	Not in use with the equipment (open)
79	LATCH	O	Data latch output to the FL tube driver (IC505, 506)
80	–	O	Not in use with the equipment (open)

***1 Key input (analog port)**

Voltage (V) / Input port	0	0.63	1.3	2.0	2.6	3.2
Pin ㉑ KEY 0	POWER S551	FUNCTION AUDIO S552	FUNCTION VIDEO S553	WAKE UP S554	DISPLAY S555	—
Pin ㉒ KEY 1	DIRECT S561	EQ S562	SURROUND S563	DBFB S564	PRESET UP ▷ S565	PRESET DOWN ◁ S567

***2 DBFB level control**

Level / Input port	OFF	1	2	3	4
Pin ㊲ A	–	L	H	L	H
Pin ㊳ B	–	L	L	H	H
Pin ㊴ INH	H	L	L	L	L

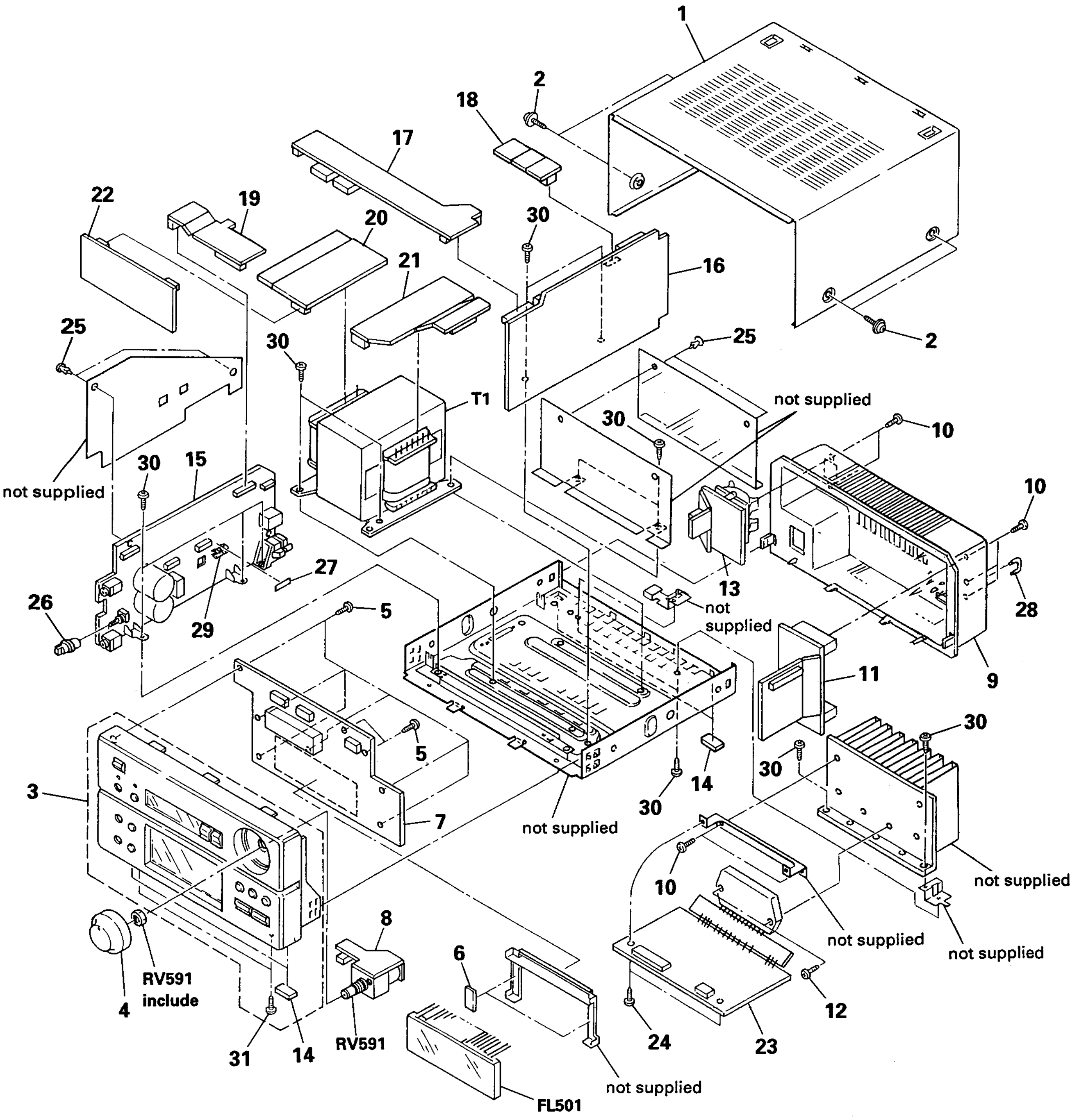
SECTION 4
EXPLODED VIEW

NOTE:

- –XX, –X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB,BALANCE(WHITE)...(RED)
  ↑ Parts color ↑ Cabinet's color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- CND : Canadian model
  G : Germany model
  IT : Italian model
  EA : Saudi Arabia model
  AUS : Australian model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.


1
2
18
17
22
19
20
30
21
16
25
30
25
2
T1
not supplied
30
10
30
15
not supplied
10
26
27
29
5
13
not supplied
28
9
11
30
5
3
7
30
14
30
not supplied
10
not supplied
not supplied
8
not supplied
6
RV591
include
4
31
14
RV591
24
23
12
not supplied
FL501

Ref. No.	Part No.	Description	Remarks
1	* 4-944-522-01	CASE (K211522)	
2	3-363-099-01	SCREW (CASE +3X8 TP2)	
3	X-4941-604-1	PANEL ASSY, FRONT (US, CND, AEP, UK, G, IT)	
	X-4941-605-1	PANEL ASSY, FRONT (E, EA, AUS)	
4	X-4941-532-1	KNOB (VOLUME) ASSY	
5	4-928-635-01	SCREW, +BV (2.6X8) TAPPING	
6	* 4-932-810-11	CUSHION (FL)	
7	* A-4341-577-A	PANEL BOARD, COMPLETE (AEP, UK, E, EA, AUS)	
	* A-4341-581-A	PANEL BOARD, COMPLETE (G, IT)	
	* A-4345-442-A	PANEL BOARD, COMPLETE (US, CND)	
8	* 1-638-551-11	VOLUME BOARD	
9	* 4-943-337-21	PANEL, BACK (US, CND, AEP, UK, G, IT, AUS)	
	* 4-943-337-11	PANEL, BACK (E, EA)	
10	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
11	* 1-638-558-11	JACK BOARD	
12	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3	
13	* 1-638-559-11	SPEAKER BOARD	
14	4-930-336-01	FOOT (FELT)	
15	* A-4341-583-A	POWER SUPPLY BOARD, COMPLETE(AEP, UK, AUS)	
	* A-4341-579-A	POWER SUPPLY BOARD, COMPLETE (E)	
	* A-4341-594-A	POWER SUPPLY BOARD, COMPLETE (G, IT)	
	* A-4341-844-A	POWER SUPPLY BOARD, COMPLETE (US, CND)	
	* A-4345-699-A	POWER SUPPLY BOARD, COMPLETE (EA)	

Ref. No.	Part No.	Description	Remarks
16	* A-4341-582-A	AUDIO BOARD, COMPLETE (AEP, UK, AUS)	
	* A-4341-578-A	AUDIO BOARD, COMPLETE (E, EA)	
	* A-4341-593-A	AUDIO BOARD, COMPLETE (G, IT)	
	* A-4345-443-A	AUDIO BOARD, COMPLETE (US, CND)	
17	* 1-638-539-11	CONNECTOR BOARD	
18	* 1-638-560-11	CONNECTOR (A) BOARD	
19	* 1-638-561-11	CONNECTOR (B) BOARD	
20	* 1-638-555-11	TRANSFORMER (A) BOARD	
21	* 1-638-556-11	TRANSFORMER (B) BOARD	
22	* 1-638-553-11	TRANSFORMER (C) BOARD	
23	* A-4345-441-A	POWER AMP BOARD, COMPLETE (AEP, UK, AUS)	
	* A-4341-571-A	POWER AMP BOARD, COMPLETE (E, EA)	
	* A-4345-438-A	POWER AMP BOARD, COMPLETE (G, IT)	
	* A-4345-763-A	POWER AMP BOARD, COMPLETE (US, CND)	
24	7-685-645-79	SCREW +BVTP 3X6 TYPE2 IT-3	
25	4-812-134-11	RIVET NYLON, 3.5	
26	4-932-882-11	KNOB (HP. VOL)	
27	3-701-947-12	LABEL (T1.25A), FUSE (AEP, UK, G, IT, E, EA, AUS)	
	3-701-946-13	LABEL (2A 250V), FUSE (US, CND)	
	3-701-948-18	LABEL (T2.5A), FUSE (E, EA)	
28	* 1-535-706-11	PLUG, JUMPER (E, EA)	
29	* 1-533-213-31	HOLDER, FUSE	
30	7-682-547-04	SCREW +BVTT 3X6 (S)	
31	7-682-547-09	SCREW +BVTT 3X6 (S)	

SECTION 5

ELECTRICAL PARTS LIST

AUDIO **PANEL**

VOLUME **CONNECTOR**

NOTE:

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE : Metal Oxide-film resistor
  F : nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : µ, for example :
  uA...: µA..., uPA...: µPA...,
  uPB...: µPB..., uPC...: µPC...,
  uPD...: µPD...
- CAPACITORS
  uF :µF
- COILS
  uH : µH

Ref. No.	Part No.	Description			Remarks
	* A-4341-577-A	PANEL BOARD, COMPLETE (AEP,UK,E,EA,AUS)			
	* A-4341-581-A	PANEL BOARD, COMPLETE (G,IT)			
	* A-4345-442-A	PANEL BOARD, COMPLETE (US,CND)			
		*********************			
	* A-4341-582-A	AUDIO BOARD, COMPLETE (AEP,UK,AUS)			
	* A-4341-578-A	AUDIO BOARD, COMPLETE (E,EA)			
	* A-4341-593-A	AUDIO BOARD, COMPLETE (G,IT)			
	* A-4345-443-A	AUDIO BOARD, COMPLETE (US,CND)			
		*********************			
	* 1-638-539-11	CONNECTOR BOARD			
		***************			
	* 1-638-551-11	VOLUME BOARD			
		************			
	* 4-932-810-11	CUSHION (FL)			
		< CAPACITOR >			
C201	1-124-907-11	ELECT	10uF	20%	50V
C202	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C203	1-124-907-11	ELECT	10uF	20%	50V
C204	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C205	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C206	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C207	1-164-346-11	CERAMIC CHIP	1uF		16V
C210	1-124-443-00	ELECT	100uF	20%	10V
C211	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C212	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C213	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C214	1-164-343-11	CERAMIC CHIP	0.056uF	10%	25V
C215	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C216	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C217	1-163-024-00	CERAMIC CHIP	0.018uF	10%	50V
C218	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C219	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C220	1-163-016-00	CERAMIC CHIP	0.0039uF	10%	50V
C221	1-163-014-00	CERAMIC CHIP	0.0027uF	10%	50V
C222	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C223	1-163-010-11	CERAMIC CHIP	0.0012uF	10%	50V
C224	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C251	1-124-907-11	ELECT	10uF	20%	50V
C252	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C253	1-124-907-11	ELECT	10uF	20%	50V
C254	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C255	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C256	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C257	1-164-346-11	CERAMIC CHIP	1uF		16V
C261	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C262	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C263	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C264	1-164-343-11	CERAMIC CHIP	0.056uF	10%	25V
C265	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C266	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C267	1-163-024-00	CERAMIC CHIP	0.018uF	10%	50V
C268	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C269	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C270	1-163-016-00	CERAMIC CHIP	0.0039uF	10%	50V
C271	1-163-014-00	CERAMIC CHIP	0.0027uF	10%	50V
C272	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C273	1-163-010-11	CERAMIC CHIP	0.0012uF	10%	50V
C274	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C291	1-124-443-00	ELECT	100uF	20%	10V
C292	1-124-443-00	ELECT	100uF	20%	10V
C293	1-124-443-00	ELECT	100uF	20%	10V
C294	1-124-443-00	ELECT	100uF	20%	10V
C295	1-124-443-00	ELECT	100uF	20%	10V
C301	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C302	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C311	1-164-346-11	CERAMIC CHIP	1uF		16V
C312	1-164-346-11	CERAMIC CHIP	1uF		16V
C313	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C321	1-136-165-00	FILM	0.1uF	5%	50V
C322	1-136-165-00	FILM	0.1uF	5%	50V
C323	1-124-903-11	ELECT	1uF	20%	50V
C325	1-124-907-11	ELECT	10uF	20%	50V
C326	1-124-907-11	ELECT	10uF	20%	50V
C327	1-124-443-00	ELECT	100uF	20%	10V
C341	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C342	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C343	1-124-443-00	ELECT	100uF	20%	10V
C351	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C352	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C371	1-136-165-00	FILM	0.1uF	5%	50V

AUDIO PANEL VOLUME CONNECTOR

Ref. No.	Part No.	Description			Remarks
C372	1-136-165-00	FILM	0.1uF	5%	50V
C373	1-124-903-11	ELECT	1uF	20%	50V
C375	1-124-907-11	ELECT	10uF	20%	50V
C376	1-124-907-11	ELECT	10uF	20%	50V
C501	1-124-443-00	ELECT	100uF	20%	10V
C502	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C503	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C511	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C512	1-124-443-00	ELECT	100uF	20%	10V
C513	1-124-443-00	ELECT	100uF	20%	10V
C521	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C522	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C523	1-162-294-31	CERAMIC CHIP	0.001uF	10%	50V
C524	1-162-294-31	CERAMIC CHIP	0.001uF	10%	50V
C525	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C526	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C527	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C528	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C542	1-124-477-11	ELECT	47uF	20%	25V
C551	1-124-443-00	ELECT	100uF	20%	10V
C552	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C553	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C554	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C555	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C556	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C557	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C591	1-124-443-00	ELECT	100uF	20%	10V
C592	1-124-907-11	ELECT	10uF	20%	50V
C593	1-124-907-11	ELECT	10uF	20%	50V
C601	1-124-907-11	ELECT	10uF	20%	50V
C602	1-124-907-11	ELECT	10uF	20%	50V
C603	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C604	1-124-472-11	ELECT	470uF	20%	10V
C605	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C651	1-124-907-11	ELECT	10uF	20%	50V
C652	1-124-907-11	ELECT	10uF	20%	50V
C653	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C654	1-124-472-11	ELECT	470uF	20%	10V
C655	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C911	1-124-563-11	ELECT	2200uF	20%	25V
C912	1-124-563-11	ELECT	2200uF	20%	25V
C913	1-136-165-00	FILM	0.1uF	5%	50V
C914	1-136-165-00	FILM	0.1uF	5%	50V
C920	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C921	1-164-346-11	CERAMIC CHIP	1uF		16V
C922	1-124-443-00	ELECT	100uF	20%	10V
C923	1-164-346-11	CERAMIC CHIP	1uF		16V
C924	1-124-443-00	ELECT	100uF	20%	10V
C925	1-164-346-11	CERAMIC CHIP	1uF		16V
C926	1-124-443-00	ELECT	100uF	20%	10V
C927	1-164-346-11	CERAMIC CHIP	1uF		16V
C928	1-124-443-00	ELECT	100uF	20%	10V

Ref. No.	Part No.	Description			Remarks
C929	1-164-346-11	CERAMIC CHIP	1uF		16V
C930	1-124-907-11	ELECT	10uF	20%	50V
C931	1-126-104-11	ELECT	470uF	20%	35V
C932	1-126-105-11	ELECT	1000uF	20%	35V
C933	1-124-477-11	ELECT	47uF	20%	25V
C934	1-124-477-11	ELECT	47uF	20%	25V
C941	1-124-122-11	ELECT	100uF	20%	50V
C942	1-124-907-11	ELECT	10uF	20%	50V
C943	1-124-907-11	ELECT	10uF	20%	50V
C951	1-124-122-11	ELECT	100uF	20%	50V
C952	1-124-907-11	ELECT	10uF	20%	50V
C953	1-124-907-11	ELECT	10uF	20%	50V
C954	1-163-035-00	CERAMIC CHIP	0.047uF		50V
		(CONNECTOR)			
CN201	* 1-566-154-11	CONNECTOR, BOARD TO BOARD 20P			
CN202	* 1-569-499-11	PIN, CONNECTOR 3P			
CN203	* 1-569-505-11	PIN, CONNECTOR 10P			
CN204	* 1-569-396-11	PIN, CONNECTOR 4P			
CN205	* 1-580-051-11	SOCKET, CONNECTOR 20P			
CN401	* 1-569-397-11	SOCKET, CONNECTOR 4P			
CN402	* 1-569-495-11	SOCKET, CONNECTOR 9P			
CN403	* 1-580-050-11	PIN, CONNECTOR 20P			
CN404	1-568-321-11	SOCKET, CONNECTOR 10P			
CN405	1-568-321-11	SOCKET, CONNECTOR 10P			
CN501	* 1-568-322-11	PLUG, CONNECTOR 10P			
CN502	* 1-568-322-11	PLUG, CONNECTOR 10P			
CN503	* 1-568-318-11	PLUG, CONNECTOR 6P			
CN591	1-568-317-11	SOCKET, CONNECTOR 6P			
		(DIODE)			
D291	8-719-990-36	DIODE	DCA010		
D294	8-719-990-36	DIODE	DCA010		
D311	8-719-990-36	DIODE	DCA010		
D312	8-719-990-36	DIODE	DCA010		
D331	8-719-990-36	DIODE	DCA010		
D341	8-719-990-36	DIODE	DCA010		
D342	8-719-990-36	DIODE	DCA010		
D501	8-719-990-36	DIODE	DCA010		
D502	8-719-990-36	DIODE	DCA010		
D503	8-719-990-36	DIODE	DCA010		
D504	8-719-990-36	DIODE	DCA010		
D505	8-719-990-36	DIODE	DCA010		
D550	8-719-313-71	DIODE	SEL8867B		
D551	8-719-990-36	DIODE	DCA010		
D571	8-719-301-37	DIODE	SEL2210S-CD		
D572	8-719-301-37	DIODE	SEL2210S-CD		
D573	8-719-301-37	DIODE	SEL2210S-CD		
D574	8-719-301-37	DIODE	SEL2210S-CD		
D575	8-719-301-37	DIODE	SEL2210S-CD		
D576	8-719-301-37	DIODE	SEL2210S-CD		
D591	8-719-990-36	DIODE	DCA010		

When indicating parts by reference number, please include the board name.

AUDIO PANEL VOLUME CONNECTOR

Ref. No.	Part No.	Description	Remarks
D911	8-719-210-33	DIODE EC10DS2	
D912	8-719-210-33	DIODE EC10DS2	
D913	8-719-210-33	DIODE EC10DS2	
D914	8-719-210-33	DIODE EC10DS2	
D931	8-719-210-33	DIODE EC10DS2	
D932	8-719-210-33	DIODE EC10DS2	
D933	8-719-106-79	DIODE RD13M-B1	
D941	8-719-210-33	DIODE EC10DS2	
D942	8-719-118-15	DIODE RD36M-B	
D951	8-719-210-33	DIODE EC10DS2	
D952	8-719-118-09	DIODE RD30M-B	
D953	8-719-105-82	DIODE RD5.1M-B2	
		(INDICATOR)	
FL501	1-519-649-11	INDICATOR TUBE, FLUORESCENT	
		(IC)	
IC201	8-759-636-57	IC CXA1492Q	
IC301	8-759-636-55	IC M5218AFP	
IC303	8-759-636-55	IC M5218AFP	
IC304	8-759-516-41	IC CD4052BCM	
IC305	8-759-300-71	IC HD14053BFP	
IC501	8-759-153-02	IC uPD78134-D29-3B9	
IC502	8-759-500-31	IC X24C01P	
IC503	8-759-516-41	IC CD4052BCM	
IC504	8-759-991-11	IC XR1091DCP	
IC505	8-759-512-44	IC SN755703	
IC506	8-759-512-44	IC SN755703	
IC507	8-759-636-56	IC M66311FP	
IC508	8-759-925-74	IC SN74HC04ANS	
IC591	8-759-820-62	IC LB1639	
IC601	8-759-636-55	IC M5218AFP	
IC901	8-759-823-46	IC LA5603	
		(CHIP JUMPER)	
JR2	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR4	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR6	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR7	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR10	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR12	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR204	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR254	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR501	1-216-295-00	METAL CHIP 0 5% 1/10W	(US, CND)
JR502	1-216-295-00	METAL CHIP 0 5% 1/10W	(Except US, CND)
JR503	1-216-295-00	METAL CHIP 0 5% 1/10W	(Except US, CND)
JR504	1-216-295-00	METAL CHIP 0 5% 1/10W	(US, CND)
JR701	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR751	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR911	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR912	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR913	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR915	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR916	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR917	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR918	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR919	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR920	1-216-296-00	METAL CHIP 0 5% 1/8W	
JR922	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR923	1-216-295-00	METAL CHIP 0 5% 1/10W	
		(TRANSISTOR)	
Q292	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q293	8-729-216-22	TRANSISTOR 2SA1162-G	
Q311	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q312	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q321	8-729-107-43	TRANSISTOR 2SC3624-L18	
Q322	8-729-805-67	TRANSISTOR 2SA1342	
Q323	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q341	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q342	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q371	8-729-107-43	TRANSISTOR 2SC3624-L18	
Q373	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q501	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q502	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q921	8-729-805-43	TRANSISTOR 2SC3396	
Q931	8-729-209-15	TRANSISTOR 2SD2012	
Q932	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q941	8-729-808-01	TRANSISTOR 2SD1622-S	
Q951	8-729-820-86	TRANSISTOR 2SB1121-ST	
		(RESISTOR)	
R201	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R202	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R203	1-216-085-00	METAL CHIP 33K 5% 1/10W	
R206	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R207	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R208	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R211	1-216-121-00	METAL CHIP 1M 5% 1/10W	
R212	1-216-121-00	METAL CHIP 1M 5% 1/10W	
R213	1-216-121-00	METAL CHIP 1M 5% 1/10W	
R214	1-216-121-00	METAL CHIP 1M 5% 1/10W	
R215	1-216-121-00	METAL CHIP 1M 5% 1/10W	
R216	1-216-121-00	METAL CHIP 1M 5% 1/10W	
R217	1-216-121-00	METAL CHIP 1M 5% 1/10W	
R251	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R252	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R253	1-216-085-00	METAL CHIP 33K 5% 1/10W	
R256	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R257	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R258	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R261	1-216-121-00	METAL CHIP 1M 5% 1/10W	
R262	1-216-121-00	METAL CHIP 1M 5% 1/10W	
R263	1-216-121-00	METAL CHIP 1M 5% 1/10W	

When indicating parts by reference number, please include the board name.

AUDIO **PANEL** **VOLUME** **CONNECTOR**

Ref. No.	Part No.	Description				Remarks
R264	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R265	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R266	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R267	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R291	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R292	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R301	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R302	1-216-077-00	METAL CHIP	15K	5%	1/10W	
R304	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R311	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R312	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R313	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R314	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R315	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R316	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R317	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R318	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R321	1-216-053-00	METAL CHIP	1. 5K	5%	1/10W	
R322	1-216-109-00	METAL CHIP	330K	5%	1/10W	
R323	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R324	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R325	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R326	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R327	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R328	1-216-041-00	METAL CHIP	470	5%	1/10W	
R329	1-216-025-00	METAL CHIP	100	5%	1/10W	
R330	1-216-057-00	METAL CHIP	2. 2K	5%	1/10W	
R331	1-216-025-00	METAL CHIP	100	5%	1/10W	
R332	1-216-069-00	METAL CHIP	6. 8K	5%	1/10W	
R333	1-216-748-11	METAL CHIP	39K	5%	1/10W	
R334	1-216-105-00	METAL CHIP	220K	5%	1/10W	
R341	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R342	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R343	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R344	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R345	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R346	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R347	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R348	1-216-041-00	METAL CHIP	470	5%	1/10W	
R349	1-216-025-00	METAL CHIP	100	5%	1/10W	
R351	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R352	1-216-077-00	METAL CHIP	15K	5%	1/10W	
R354	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R371	1-216-053-00	METAL CHIP	1. 5K	5%	1/10W	
R372	1-216-109-00	METAL CHIP	330K	5%	1/10W	
R373	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R374	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R375	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R376	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R377	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R378	1-216-041-00	METAL CHIP	470	5%	1/10W	
R379	1-216-025-00	METAL CHIP	100	5%	1/10W	
R380	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R381	1-216-025-00	METAL CHIP	100	5%	1/10W	
R382	1-216-069-00	METAL CHIP	6. 8K	5%	1/10W	
R383	1-216-748-11	METAL CHIP	39K	5%	1/10W	
R384	1-216-105-00	METAL CHIP	220K	5%	1/10W	
R391	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R398	1-216-041-00	METAL CHIP	470	5%	1/10W	
R399	1-216-025-00	METAL CHIP	100	5%	1/10W	
R501	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R502	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R503	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R504	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R505	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R506	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R507	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R511	1-216-053-00	METAL CHIP	1. 5K	5%	1/10W	
R512	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R513	1-216-009-00	METAL CHIP	22	5%	1/10W	
R521	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R522	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R523	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R524	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R525	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R526	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R527	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R528	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R530	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R531	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R532	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R533	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R534	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R535	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R536	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R537	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R538	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R539	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R540	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R541	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R542	1-216-041-00	METAL CHIP	470	5%	1/10W	
R551	1-216-061-00	METAL CHIP	3. 3K	5%	1/10W	
R552	1-216-041-00	METAL CHIP	470	5%	1/10W	
R553	1-216-045-00	METAL CHIP	680	5%	1/10W	
R554	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R555	1-216-053-00	METAL CHIP	1. 5K	5%	1/10W	
R561	1-216-061-00	METAL CHIP	3. 3K	5%	1/10W	
R562	1-216-041-00	METAL CHIP	470	5%	1/10W	
R563	1-216-045-00	METAL CHIP	680	5%	1/10W	
R564	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R565	1-216-053-00	METAL CHIP	1. 5K	5%	1/10W	
R566	1-216-057-00	METAL CHIP	2. 2K	5%	1/10W	
R571	1-216-045-00	METAL CHIP	680	5%	1/10W	
R572	1-216-045-00	METAL CHIP	680	5%	1/10W	

When indicating parts by reference number, please include the board name.

AUDIO PANEL VOLUME CONNECTOR POWER SUPPLY POWER AMP TRANSFORMER(A) TRANSFORMER(B) JACK TRANSFORMER(C) SPEAKER CONNECTOR(A) CONNECTOR(B)

Ref. No.	Part No.	Description	Remarks
R573	1-216-045-00	METAL CHIP 680 5% 1/10W	
R574	1-216-045-00	METAL CHIP 680 5% 1/10W	
R575	1-216-045-00	METAL CHIP 680 5% 1/10W	
R576	1-216-045-00	METAL CHIP 680 5% 1/10W	
R577	1-216-037-00	METAL CHIP 330 5% 1/10W	
R581	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R582	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R583	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R584	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R585	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R586	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R587	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R588	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R591	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R592	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R593	1-216-043-00	METAL CHIP 560 5% 1/10W	
R594	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R601	1-216-075-00	METAL CHIP 12K 5% 1/10W	
R602	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R603	1-216-075-00	METAL CHIP 12K 5% 1/10W	
R604	1-216-295-00	METAL CHIP 0 5% 1/10W	
R606	1-216-021-00	METAL CHIP 68 5% 1/10W	
R651	1-216-075-00	METAL CHIP 12K 5% 1/10W	
R652	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R653	1-216-075-00	METAL CHIP 12K 5% 1/10W	
R654	1-216-017-00	METAL CHIP 47 5% 1/10W	
R923	1-216-025-00	METAL CHIP 100 5% 1/10W	
R931	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R932	1-216-025-00	METAL CHIP 100 5% 1/10W	
R933	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R934	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R941	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R951	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R952	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R953	1-216-025-00	METAL CHIP 100 5% 1/10W	
		(VARIABLE RESISTOR)	
RV591	1-241-418-11	RES, VAR, CARBON 10K (VOLUME)	
		(SWITCH)	
S551	1-572-198-11	SWITCH, KEY BOARD (SYSTEM POWER)	
S552	1-572-198-11	SWITCH, KEY BOARD (FUNCTION >)	
S553	1-572-198-11	SWITCH, KEY BOARD (FUNCTION <)	
S554	1-572-198-11	SWITCH, KEY BOARD (WAKE UP)	
S555	1-572-198-11	SWITCH, KEY BOARD (DISPLAY)	
S561	1-572-198-11	SWITCH, KEY BOARD (DIRECT)	
S562	1-572-198-11	SWITCH, KEY BOARD (EQ)	
S563	1-572-198-11	SWITCH, KEY BOARD (S-SUR)	
S564	1-572-198-11	SWITCH, KEY BOARD (DBFB)	
S565	1-572-198-11	SWITCH, KEY BOARD (PRESET ▷)	
S567	1-572-198-11	SWITCH, KEY BOARD (PRESET ◁)	
		(CRYSTAL)	
X501	1-577-364-11	VIBRATOR, CERAMIC (12MHz)	
**			
	* A-4341-583-A	POWER SUPPLY BOARD, COMPLETE(AEP, UK, AUS)	
	* A-4341-579-A	POWER SUPPLY BOARD, COMPLETE (E)	
	* A-4341-594-A	POWER SUPPLY BOARD, COMPLETE (G, IT)	
	* A-4341-844-A	POWER SUPPLY BOARD, COMPLETE (US, CND)	
	* A-4345-699-A	POWER SUPPLY BOARD, COMPLETE (EA)	
		****************************	
	* A-4345-441-A	POWER AMP BOARD, COMPLETE (AEP, UK, AUS)	
	* A-4341-571-A	POWER AMP BOARD, COMPLETE (E, EA)	
	* A-4345-438-A	POWER AMP BOARD, COMPLETE (G, IT)	
	* A-4345-763-A	POWER AMP BOARD, COMPLETE (US, CND)	
		*************************	
	* 1-638-553-11	TRANSFORMER (C) BOARD	
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	* 1-638-555-11	TRANSFORMER (A) BOARD	
		*********************	
	* 1-638-556-11	TRANSFORMER (B) BOARD	
		*********************	
	* 1-638-558-11	JACK BOARD	
		**********	
	* 1-638-559-11	SPEAKER BOARD	
		*************	
	* 1-638-560-11	CONNECTOR (A) BOARD	
		*******************	
	* 1-638-561-11	CONNECTOR (B) BOARD	
		*******************	
	* 1-533-213-31	HOLDER, FUSE	
		(CAPACITOR)	
C401	1-162-282-31	CERAMIC 100PF 10% 50V	
C451	1-162-282-31	CERAMIC 100PF 10% 50V	
C605	1-161-379-00	CERAMIC 0.01uF 20% 25V	
C611	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C612	1-124-903-11	ELECT 1uF 20% 50V	
C613	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C614	1-124-120-11	ELECT 220uF 20% 25V	
C615	1-124-464-11	ELECT 0.22uF 20% 50V	
C616	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C617	1-124-903-11	ELECT 1uF 20% 50V	
C618	1-124-903-11	ELECT 1uF 20% 50V	
C620	1-161-379-00	CERAMIC 0.01uF 20% 25V	
C655	1-161-379-00	CERAMIC 0.01uF 20% 25V	
C701	1-126-176-11	ELECT 220uF 20% 10V	
C702	1-126-176-11	ELECT 220uF 20% 10V	

When indicating parts by reference number, please include the board name.

POWER SUPPLY **POWER AMP** **TRANSFORMER(A)** **TRANSFORMER(B)**
JACK **TRANSFORMER(C)** **SPEAKER** **CONNECTOR(A)** **CONNECTOR(B)**

Ref. No.	Part No.	Description			Remarks
C704	1-162-306-11	CERAMIC	0.01uF	20%	16V
C705	1-161-494-00	CERAMIC	0.022uF		25V
C706	1-124-927-11	ELECT	4.7uF	20%	100V
C707	1-124-478-11	ELECT	100uF	20%	25V
C801	1-124-907-11	ELECT	10uF	20%	50V
C802	1-162-290-31	CERAMIC	470PF	10%	50V (Except G, IT)
C803	1-124-122-11	ELECT	100uF	20%	35V
C804	1-162-282-31	CERAMIC	100PF	10%	50V
C806	1-124-910-11	ELECT	47uF	20%	50V
C807	1-124-122-11	ELECT	100uF	20%	50V
C809	1-126-233-11	ELECT	22uF	20%	50V
C810	1-136-165-00	FILM	0.1uF	5%	50V
C812	1-136-165-00	FILM	0.1uF	5%	50V
C813	1-136-165-00	FILM	0.1uF	5%	50V
C814	1-164-095-11	CERAMIC	0.01uF	10%	16V (G, IT)
C816	1-126-233-11	ELECT	22uF	20%	50V
C851	1-124-907-11	ELECT	10uF	20%	50V
C852	1-162-290-31	CERAMIC	470PF	10%	50V (Except G, IT)
C853	1-124-122-11	ELECT	100uF	20%	35V
C854	1-162-282-31	CERAMIC	100PF	10%	50V
C856	1-124-910-11	ELECT	47uF	20%	50V
C860	1-136-165-00	FILM	0.1uF	5%	50V
C863	1-136-165-00	FILM	0.1uF	5%	50V
C866	1-126-233-11	ELECT	22uF	20%	50V
C891	1-136-165-00	FILM	0.1uF	5%	50V (G, IT)
C892	1-136-165-00	FILM	0.1uF	5%	50V (G, IT)
C901	1-126-224-11	ELECT	4700uF	20%	42V
C902	1-126-224-11	ELECT	4700uF	20%	42V
C903	1-136-171-00	FILM	0.33uF	5%	50V
C904	1-136-171-00	FILM	0.33uF	5%	50V

〈 CONNECTOR 〉

Ref. No.	Part No.	Description
CN411	* 1-580-739-11	SOCKET, CONNECTOR 15P
CN412	* 1-580-740-11	SOCKET, CONNECTOR 17P
CN413	1-563-314-11	CONNECTOR, BOARD TO BOARD 20P
CN601	* 1-569-504-11	PIN, CONNECTOR 9P
CN701	1-563-310-11	CONNECTOR, BOARD TO BOARD 8P
CN801	1-569-499-21	PIN, CONNECTOR 3P
CN802	* 1-569-505-11	PIN, CONNECTOR 10P
CN811	1-569-490-11	SOCKET, CONNECTOR 3P
CN812	1-569-490-11	SOCKET, CONNECTOR 3P
CN821	* 1-569-496-11	SOCKET, CONNECTOR 10P
CN822	* 1-569-496-11	SOCKET, CONNECTOR 10P
CN831	* 1-569-505-11	PIN, CONNECTOR 10P
CN832	* 1-566-123-11	CONNECTOR, BOARD TO BOARD 8P
CN901	⚠ 1-526-930-11	INLET, AC (US, CND, E)
CN901	⚠ 1-526-931-11	INLET, AC (Except US, CND, E)
CN902	* 1-580-940-11	PIN, CONNECTOR 4P
CN903	* 1-580-940-11	PIN, CONNECTOR 4P (E, EA)
CN904	* 1-569-502-11	PIN, CONNECTOR 7P
CN911	* 1-580-939-11	SOCKET, CONNECTOR 4P
CN912	* 1-580-939-11	SOCKET, CONNECTOR 4P (E, EA)
CN913	* 1-569-493-11	SOCKET, CONNECTOR 7P
CN914	* 1-569-502-11	PIN, CONNECTOR 7P
CN921	* 1-569-502-11	PIN, CONNECTOR 7P
CN922	* 1-569-496-11	SOCKET, CONNECTOR 10P
CN931	* 1-569-493-11	SOCKET, CONNECTOR 7P
CN932	* 1-569-493-11	SOCKET, CONNECTOR 7P

〈 DIODE 〉

Ref. No.	Part No.	Description	
D701	8-719-912-20	DIODE	1SS120
D801	8-719-912-20	DIODE	1SS120
D811	8-719-912-20	DIODE	1SS120
D851	8-719-912-20	DIODE	1SS120
D901	8-719-312-09	DIODE	RBA-402
D902	8-719-912-20	DIODE	1SS120
D903	8-719-912-20	DIODE	1SS120

〈 FUSE 〉

Ref. No.	Part No.	Description
F402	⚠ 1-532-782-21	FUSE, MICRO (SECONDARY) 4A (US, CND)
F403	⚠ 1-532-782-21	FUSE, MICRO (SECONDARY) 4A (US, CND)
F901	⚠ 1-532-285-00	FUSE T1.25A (Except US, CND)
F901	⚠ 1-576-104-11	FUSE 2A (US, CND)
F902	⚠ 1-532-286-00	FUSE T2.5A (E, EA)
F911	⚠ 1-532-783-21	FUSE, MICRO (SECONDARY) 5A (US, CND)
F912	⚠ 1-532-783-21	FUSE, MICRO (SECONDARY) 5A (US, CND)

〈 IC 〉

Ref. No.	Part No.	Description	
IC701	8-759-111-68	IC	uPC1237HA
IC801	8-749-900-96	IC	STK4142MK2 (Except US, CND)
IC801	8-749-920-09	IC	STK4152MK2 (US, CND)

〈 IC LINK 〉

Ref. No.	Part No.	Description
ICP402	⚠ 1-532-845-21	LINK, IC (Except US, CND)
ICP403	⚠ 1-532-845-21	LINK, IC (Except US, CND)
ICP911	⚠ 1-532-846-21	LINK, IC (Except US, CND)
ICP912	⚠ 1-532-846-21	LINK, IC (Except US, CND)

〈 JACK 〉

Ref. No.	Part No.	Description
J401	1-565-304-11	JACK, PIN 4P (E, EA)
J402	1-569-662-11	JACK, PIN 1P
J601	1-562-837-21	JACK
J611	1-562-837-21	JACK

〈 COIL 〉

Ref. No.	Part No.	Description
L801	* 1-420-872-00	COIL, AIR CORE
L851	* 1-420-872-00	COIL, AIR CORE

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

POWER SUPPLY **POWER AMP** **TRANSFORMER(A)** **TRANSFORMER(B)**
JACK **TRANSFORMER(C)** **SPEAKER** **CONNECTOR(A)** **CONNECTOR(B)**

Ref. No.	Part No.	Description	Remarks
		(LINE FILTER)	
LF901 ⚠	1-424-485-11	FILTER, LINE (G, IT)	
		(TRANSISTOR)	
Q611	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q612	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q701	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q801	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q851	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
		(RESISTOR)	
R401	1-249-417-11	CARBON 1K 5% 1/4W	
R451	1-249-417-11	CARBON 1K 5% 1/4W	
R605	1-249-405-11	CARBON 100 5% 1/4W	
R606	1-249-429-11	CARBON 10K 5% 1/4W	
R611	1-249-429-11	CARBON 10K 5% 1/4W	
R612	1-249-417-11	CARBON 1K 5% 1/4W	
R613	1-249-429-11	CARBON 10K 5% 1/4W	
R614	1-249-441-11	CARBON 100K 5% 1/4W	
R615	1-249-429-11	CARBON 10K 5% 1/4W	
R616	1-249-429-11	CARBON 10K 5% 1/4W	
R617	1-249-441-11	CARBON 100K 5% 1/4W	
R618	1-249-441-11	CARBON 100K 5% 1/4W	
R619	1-247-903-00	CARBON 1M 5% 1/4W	
R620	1-249-441-11	CARBON 100K 5% 1/4W	
R655	1-249-405-11	CARBON 100 5% 1/4W	
R701	1-249-433-11	CARBON 22K 5% 1/4W	
R702	1-249-441-11	CARBON 100K 5% 1/4W	
R703	1-249-433-11	CARBON 22K 5% 1/4W	
R704	1-249-433-11	CARBON 22K 5% 1/4W	
R705	1-249-429-11	CARBON 10K 5% 1/4W	
R706	1-249-437-11	CARBON 47K 5% 1/4W	
R801	1-249-417-11	CARBON 1K 5% 1/4W	
R802	1-249-437-11	CARBON 47K 5% 1/4W	
R803	1-249-414-11	CARBON 560 5% 1/4W	
R804	1-249-437-11	CARBON 47K 5% 1/4W	
R805	1-247-756-11	CARBON 2.2K 5% 1/2W	
R806	1-247-756-11	CARBON 2.2K 5% 1/2W	
R807 ⚠	1-212-881-11	FUSIBLE 100 5% 1/4W	F
R808 ⚠	1-212-881-11	FUSIBLE 100 5% 1/4W	F
R809 ⚠	1-217-151-00	RES, METAL PLATE 0.22 2W	
R810	1-247-752-11	CARBON 1K 5% 1/2W	
R811	1-247-752-11	CARBON 1K 5% 1/2W	
R812 ⚠	1-212-958-00	FUSIBLE 10 5% 1/2W	F
R813	1-249-417-11	CARBON 1K 5% 1/4W	
R814	1-249-431-11	CARBON 15K 5% 1/4W	
R815	1-249-441-11	CARBON 100K 5% 1/4W	
R816	1-249-438-11	CARBON 56K 5% 1/4W	
R851	1-249-417-11	CARBON 1K 5% 1/4W	
R852	1-249-437-11	CARBON 47K 5% 1/4W	
R853	1-249-414-11	CARBON 560 5% 1/4W	
R854	1-249-437-11	CARBON 47K 5% 1/4W	
R855	1-247-756-11	CARBON 2.2K 5% 1/2W	
R856	1-247-756-11	CARBON 2.2K 5% 1/2W	
R859 ⚠	1-217-151-00	RES, METAL PLATE 0.22 2W	
R862 ⚠	1-212-958-00	FUSIBLE 10 5% 1/2W	F
R863	1-249-417-11	CARBON 1K 5% 1/4W	
R864	1-249-431-11	CARBON 15K 5% 1/4W	
R865	1-249-441-11	CARBON 100K 5% 1/4W	
R866	1-249-437-11	CARBON 47K 5% 1/4W	
R876 ⚠	1-212-881-11	FUSIBLE 100 5% 1/4W	F
R891 ⚠	1-244-825-00	CARBON 10 5% 1/2W	(G, IT)
R892 ⚠	1-244-825-00	CARBON 10 5% 1/2W	(G, IT)
R901 ⚠	1-202-725-00	SOLID 3.3M 10% 1/2W	(US, CND)
R902	1-249-429-11	CARBON 10K 5% 1/4W	
R903 ⚠	1-212-881-11	FUSIBLE 100 5% 1/4W	F
R921 ⚠	1-212-857-00	FUSIBLE 10 5% 1/4W	F
R925	1-216-089-00	METAL CHIP 47K 5% 1/10W	
		(VARIABLE RESISTOR)	
RV611	1-241-140-11	RES, VAR, CARBON 10K (MIC LEVEL)	
		(RELAY)	
RY801	1-515-533-11	RELAY	
RY901	1-515-626-11	RELAY	
		(VOLTAGE SELECTOR)	
S901 ⚠	1-572-009-11	SELECTOR, VOLTAGE (E, EA)	
		(TERMINAL BOARD)	
TB801	1-537-276-21	TERMINAL BOARD (SP)	
		(TRANSFORMER)	
T1 ⚠	1-450-380-11	TRANSFORMER, POWER (AEP, G, IT)	
T1 ⚠	1-450-381-11	TRANSFORMER, POWER (UK, AUS)	
T1 ⚠	1-450-382-11	TRANSFORMER, POWER (E, EA)	
T1 ⚠	1-450-383-11	TRANSFORMER, POWER (US, CND)	

****

MISCELLANEOUS
****

Ref. No.	Part No.	Description	Remarks
*	1-535-706-11	PLUG, JUMPER (E, EA)	
	1-533-213-31	HOLDER, FUSE	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

TA-H3600

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model

This set is the Amplifier section in MHC-3600 and FH-E838CD.

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS (US model)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:
With 6 ohm loads both channels driven, from 70 - 20000 Hz; rated 30 watts per channel minimum RMS power, with no more than 1% total harmonic distortion from 250 milliwatts to rated output.

Continuous RMS power output
For satellite speaker:
15 + 15 watts (8 ohms at 1 kHz, DIN)
20 + 20 watts (8 ohms at 1 kHz, 5% THD)
For bass speaker:
20 + 20 watts (6 ohms at 110 Hz, DIN)
25 + 25 watts (6 ohms at 110 Hz, 5% THD)

Music power output
(for AEP, UK, Germany, Italian model)
For satellite speaker:
35 + 35 watts (8 ohms at 1 kHz, 10% THD)
For bass speaker:
50 + 50 watts (6 ohms at 110 Hz, 10% THD)

Peak music power output
(for E, Saudi Arabia, Australian model)
340 watts

Inputs
MIX MIC (minijack):
sensitivity 1 mV, impedance 600 ohms
ADAPTOR (pin jacks)
(for E, Saudi Arabia model)
sensitivity 300 mV, impedance 47 kilohms

Outputs
HEADPHONES (stereo minijack):
accepts headphones of 8 ohms or more.
ADAPTOR (pin jacks)
(for E, Saudi Arabia model)
output level 300 mV
impedance 10 kilohms
SPEAKER (SATELLITE):
accepts speakers of 8 to 16 ohms.
SPEAKER (BASS):
accepts speakers of 6 to 16 ohms.

Design and specifications subject to change with out notice.

TABLE OF CONTENTS

Section Title Page

1. GENERAL
Location of Controls 2
2. DISASSEMBLY 3
3. DIAGRAMS
3-1. Circuit Boards Location 4
3-2. IC Block Diagrams 5
3-3. Semiconductor Lead Layouts 7
3-4. Printed Wiring Board - Main section - 9
3-5. Schematic Diagram - Main section - 11
3-6. Printed Wiring Board - Panel, Power section - 16
3-7. Schematic Diagram - Panel, Power section - 21
3-8. Pin Functions of IC501 26
4. EXPLODED VIEW 28
5. ELECTRICAL PARTS LIST 30

STEREO AMPLIFIER

SONY®

MICROFILM

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer: Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig.A)

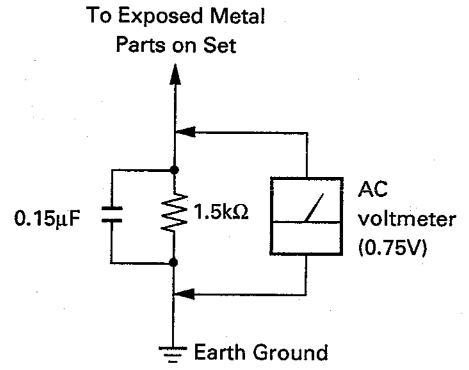


Fig. A. Using an AC voltmeter to check AC leakage.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SECURITÉ!

LES COMPOSANTS IDENTIFIES PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÉCES SONT CRITIQUES POUR LA SÉCURITE DE FONCTIONNEMENT. NE REMPLACER SES COMPOSANTS QUE PAR DES PIÉCES SONY DONT LES NUMÉROS SONT DONNES DANS CE MANUEL OU DANS LES SUPPLEMENTS PUBLIES PAR SONY.

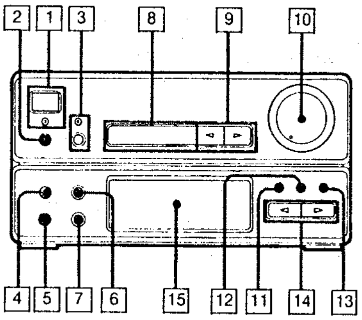
SECTION 1

GENERAL

LOCATION OF CONTROLS

This section is extracted from instruction manual.

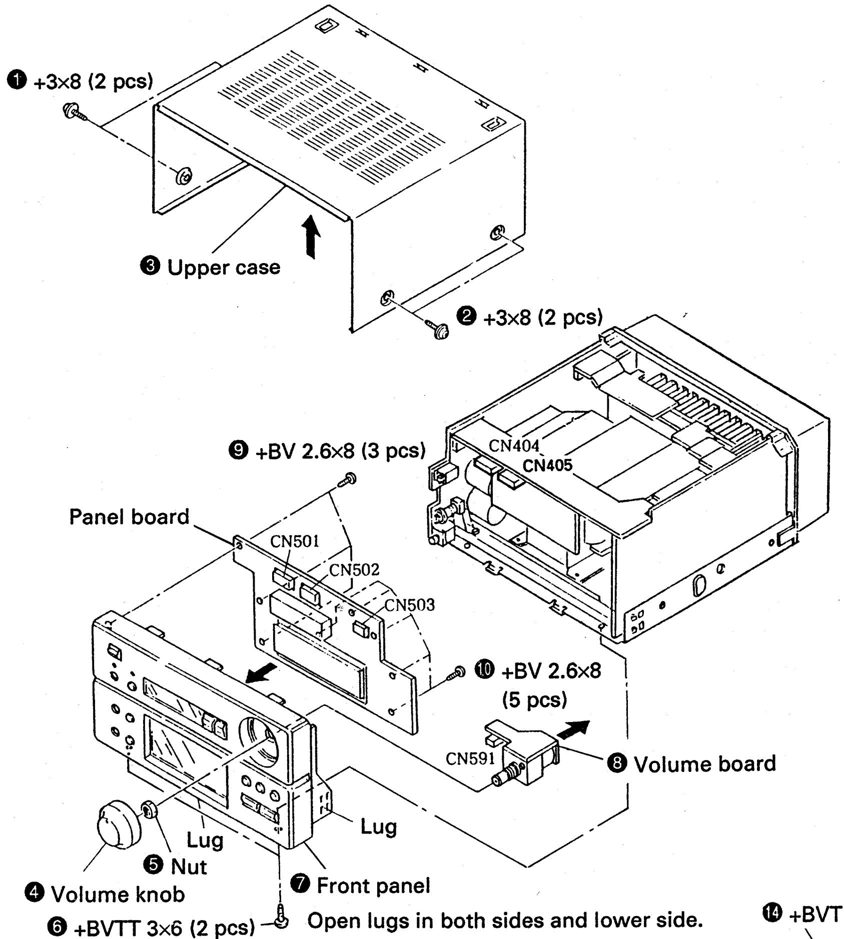
1 SYSTEM POWER switch and STANDBY indicator
The indicator remains lit as long as the AC power cord is connected to a wall outlet.
2 HEADPHONES jack (stereo minijack)
3 WAKE UP button and indicator
4 MIC (microphone) LEVEL control
5 MIX MIC (microphone) input jack
6 DISPLAY button
7 DIRECT button
8 Function indication display
9 FUNCTION <> buttons
10 VOLUME control
11 EQ (equalizer) button and indicator
12 S-SUR (simulated surround) button and indicator
13 DBFB (Dynamic Bass Feedback) button and indicator
14 PRESET ◁▷ buttons
15 Display window



SECTION 2
DISASSEMBLY

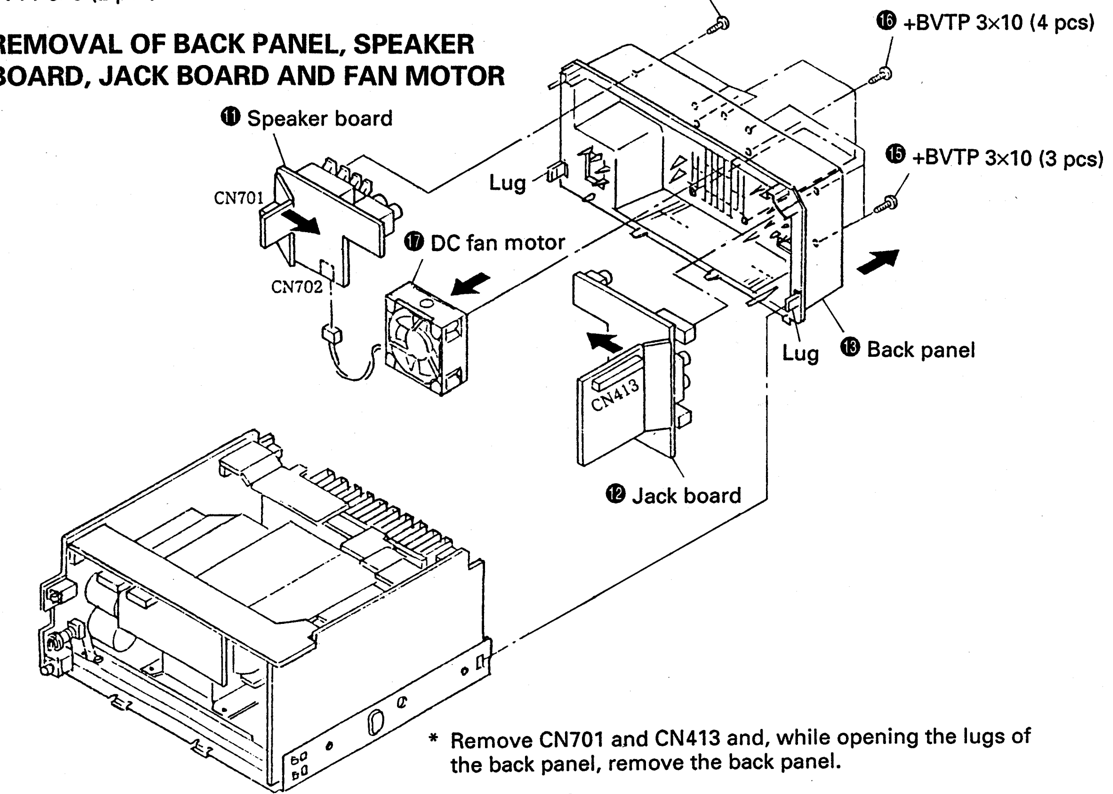
- **Remove the following parts with the numbers in that order of the numbers.**

2-1. REMOVAL OF UPPER CASE, FRONT PANEL AND PANEL BOARD


① +3×8 (2 pcs)
③ Upper case
② +3×8 (2 pcs)
CN404
CN405
⑨ +BV 2.6×8 (3 pcs)
Panel board
CN501
CN502
CN503
⑩ +BV 2.6×8 (5 pcs)
CN591
⑧ Volume board
Lug
Lug
⑤ Nut
④ Volume knob
⑦ Front panel
⑥ +BVTT 3×6 (2 pcs)

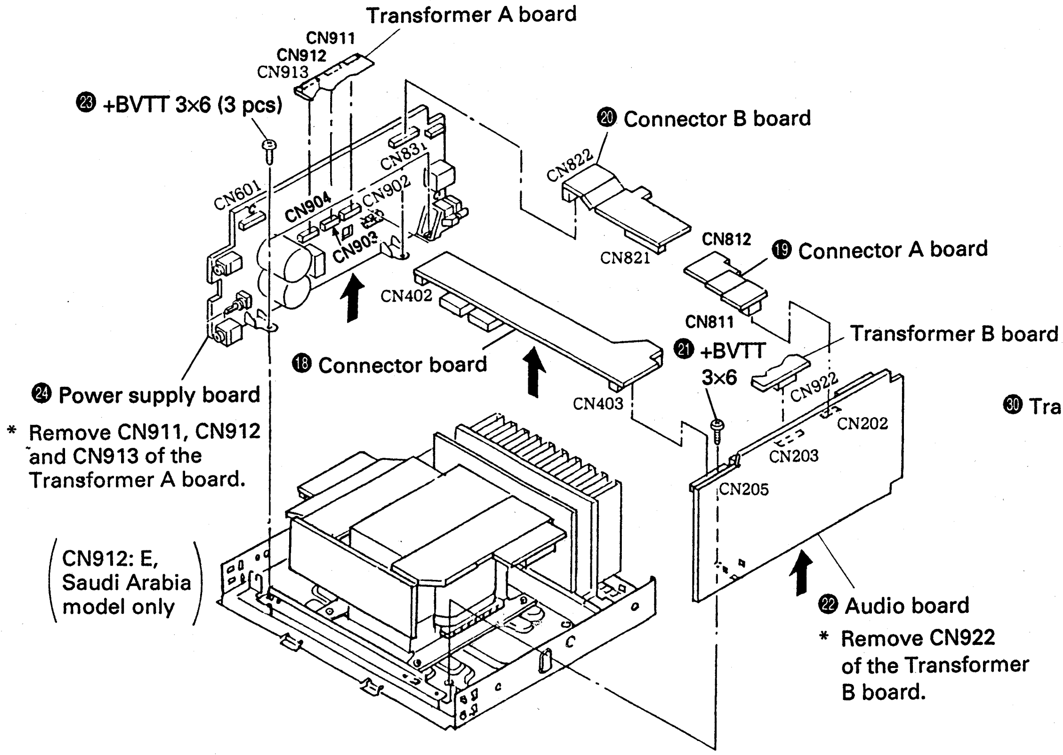
Open lugs in both sides and lower side.

2-2. REMOVAL OF BACK PANEL, SPEAKER BOARD, JACK BOARD AND FAN MOTOR


⑭ +BVTP 3×10 (3 pcs)
⑯ +BVTP 3×10 (4 pcs)
⑪ Speaker board
⑮ +BVTP 3×10 (3 pcs)
CN701
Lug
⑰ DC fan motor
CN702
CN413
Lug
⑬ Back panel
⑫ Jack board

* Remove CN701 and CN413 and, while opening the lugs of the back panel, remove the back panel.

2-3. REMOVAL OF AUDIO BOARD, POWER SUPPLY BOARD, CONNECTOR BOARD AND TRANSFORMER BOARD

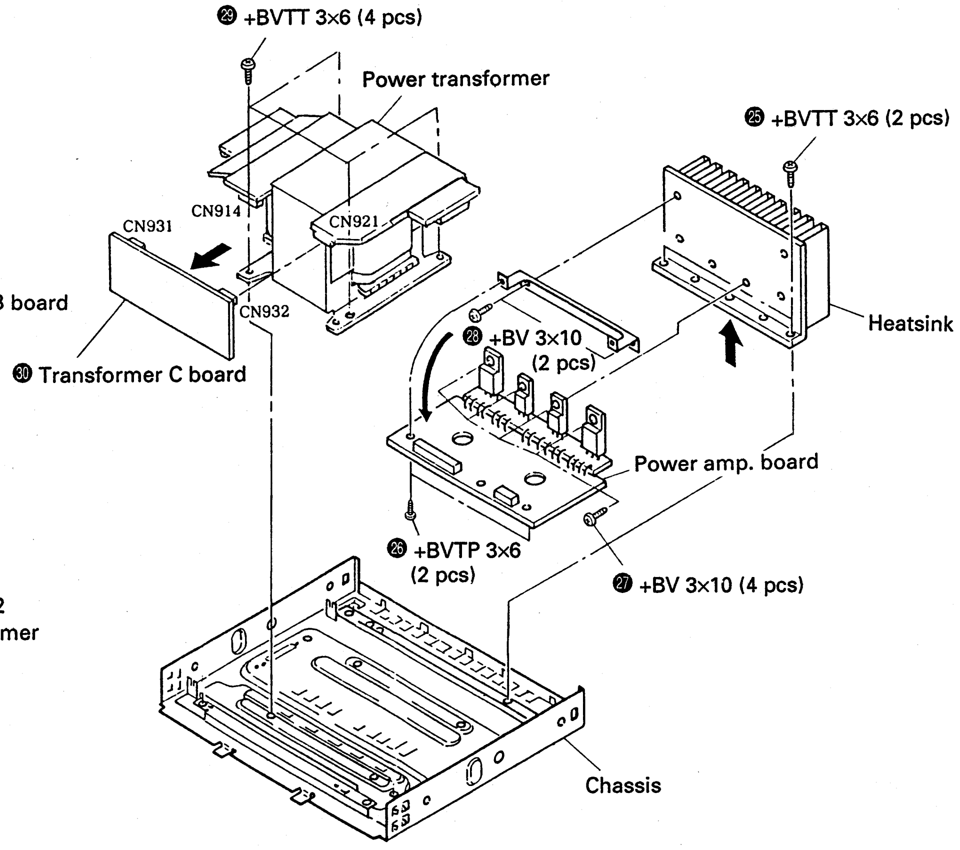

Transformer A board
CN911
CN912
CN913
㉓ +BVTT 3×6 (3 pcs)
⑳ Connector B board
CN601
CN904
CN902
CN903
CN831
CN822
CN821
CN812
⑲ Connector A board
CN402
CN811
Transformer B board
㉑ +BVTT 3×6
⑱ Connector board
CN403
CN922
CN202
CN203
㉔ Power supply board
CN205
㉒ Audio board

* Remove CN911, CN912 and CN913 of the Transformer A board.

(CN912: E, Saudi Arabia model only)

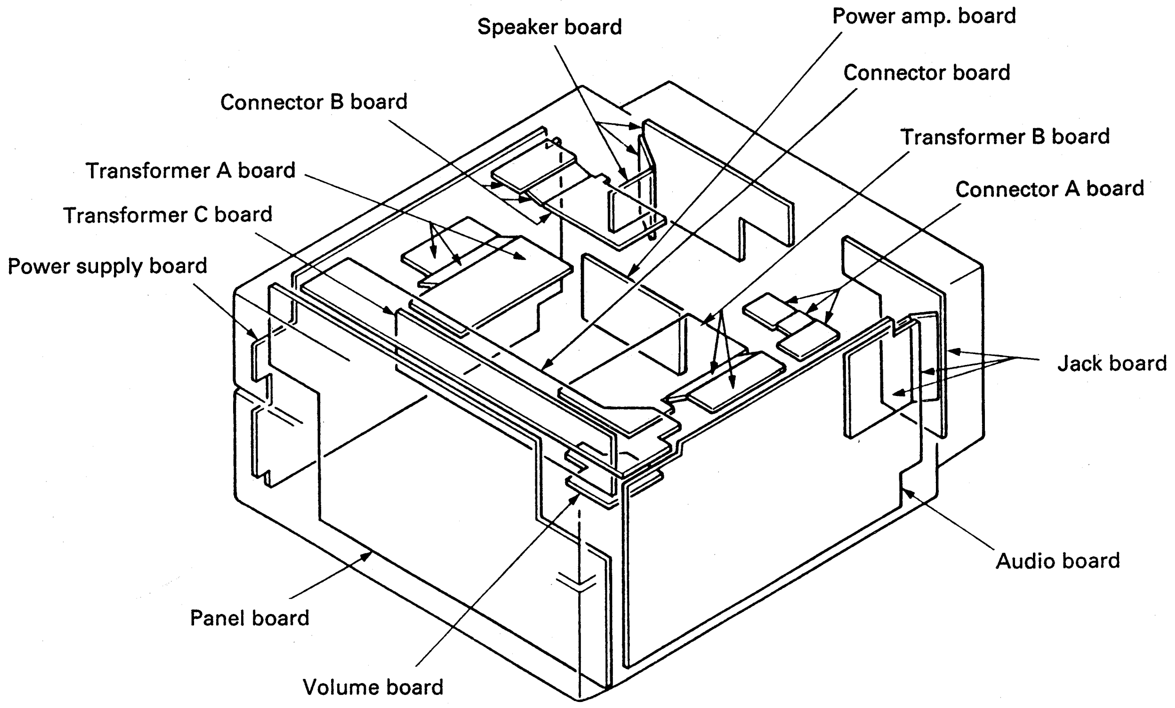
* Remove CN922 of the Transformer B board.

2-4. REMOVAL OF POWER TRANSFORMER, POWER AMP. BOARD, TRANSFORMER C BOARD AND HEATSINK


㉙ +BVTT 3×6 (4 pcs)
Power transformer
㉕ +BVTT 3×6 (2 pcs)
CN931
CN914
CN921
CN932
Heatsink
㉘ +BV 3×10 (2 pcs)
㉚ Transformer C board
Power amp. board
㉖ +BVTP 3×6 (2 pcs)
㉗ +BV 3×10 (4 pcs)
Chassis

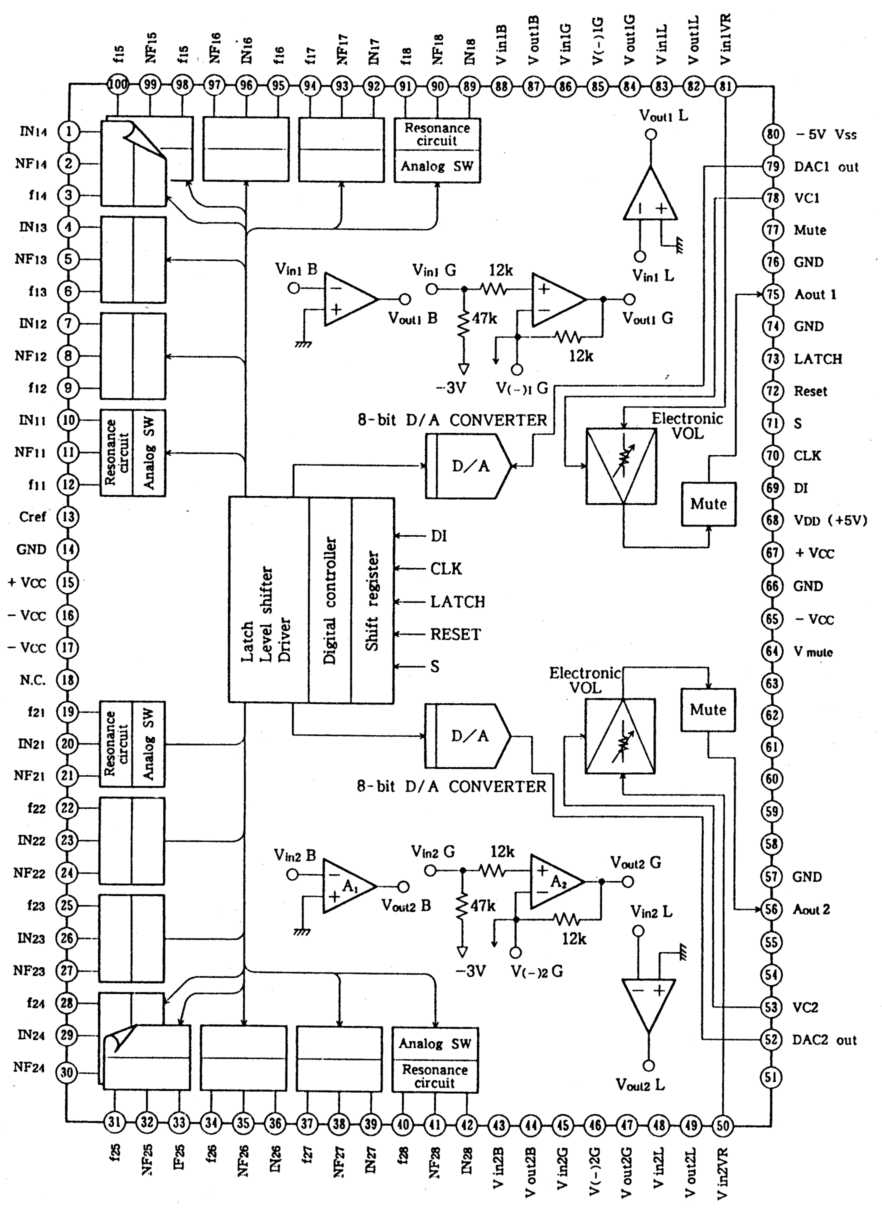
SECTION 3
DIAGRAMS

3-1. CIRCUIT BOARDS LOCATION

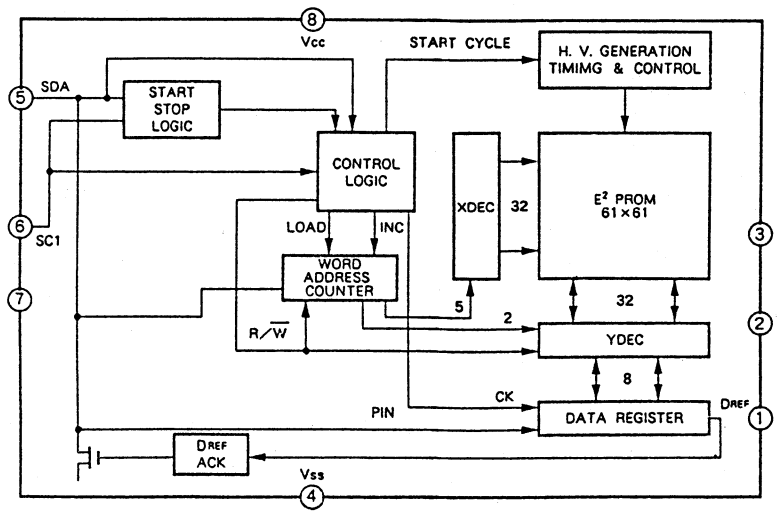

Speaker board
Power amp. board
Connector board
Connector B board
Transformer B board
Transformer A board
Connector A board
Transformer C board
Power supply board
Jack board
Audio board
Panel board
Volume board

3-2. IC BLOCK DIAGRAMS

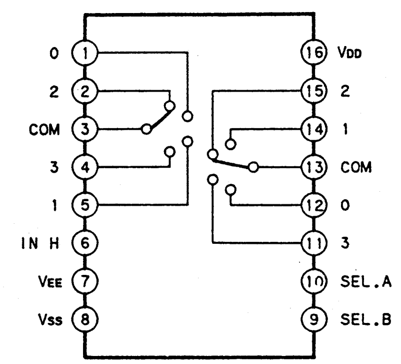
IC201 CXA1492Q


IN14
NF14
f14
IN13
NF13
f13
IN12
NF12
f12
IN11
NF11
f11
Cref
GND
+Vcc
-Vcc
-Vcc
N.C.
f21
IN21
NF21
f22
IN22
NF22
f23
IN23
NF23
f24
IN24
NF24
-5V Vss
DAC1 out
VC1
Mute
GND
Aout 1
GND
LATCH
Reset
S
CLK
DI
VDD (+5V)
+Vcc
GND
-Vcc
V mute
GND
Aout 2
VC2
DAC2 out
Resonance circuit
Analog SW
Latch Level shifter Driver
Digital controller
Shift register
DI
CLK
LATCH
RESET
S
8-bit D/A CONVERTER
D/A
Electronic VOL
Mute
Vin1 B
Vin1 G
Vout1 B
Vout1 G
Vout1 L
Vin1 L
12k
47k
-3V
V(-)1 G
Vin2 B
Vin2 G
Vout2 B
Vout2 G
Vin2 L
Vout2 L
A1
A2
V(-)2 G
f15
NF15
f15
NF16
IN16
f16
f17
NF17
IN17
f18
NF18
IN18
V in1B
V out1B
V in1G
V(-)1G
V out1G
V in1L
V out1L
V in1VR
f25
NF25
IF25
f26
NF26
IN26
f27
NF27
IN27
f28
NF28
IN28
V in2B
V out2B
V in2G
V(-)2G
V out2G
V in2L
V out2L
V in2VR

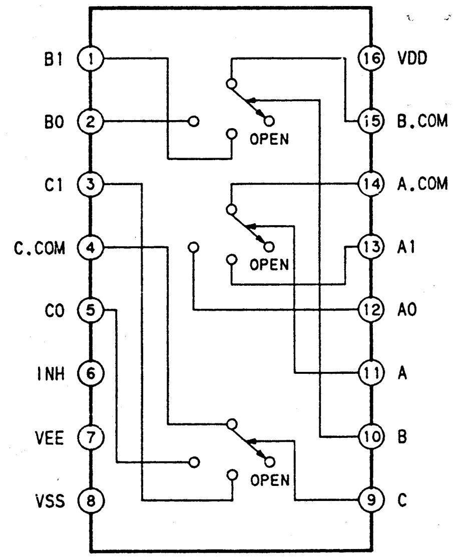
IC502 X24C01P


SDA
SC1
Vcc
Vss
START STOP LOGIC
CONTROL LOGIC
START CYCLE
H. V. GENERATION TIMIMG & CONTROL
XDEC
32
E² PROM 61×61
LOAD
INC
WORD ADDRESS COUNTER
5
2
32
R/W
YDEC
8
CK
PIN
DATA REGISTER
DREF
DREF ACK

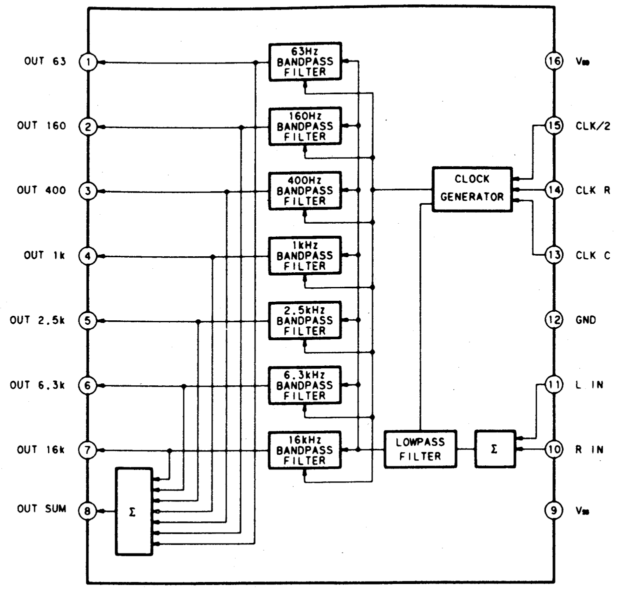
IC304, 503 MC14052BF


0
2
COM
3
1
IN H
VEE
Vss
VDD
2
1
COM
0
3
SEL.A
SEL.B

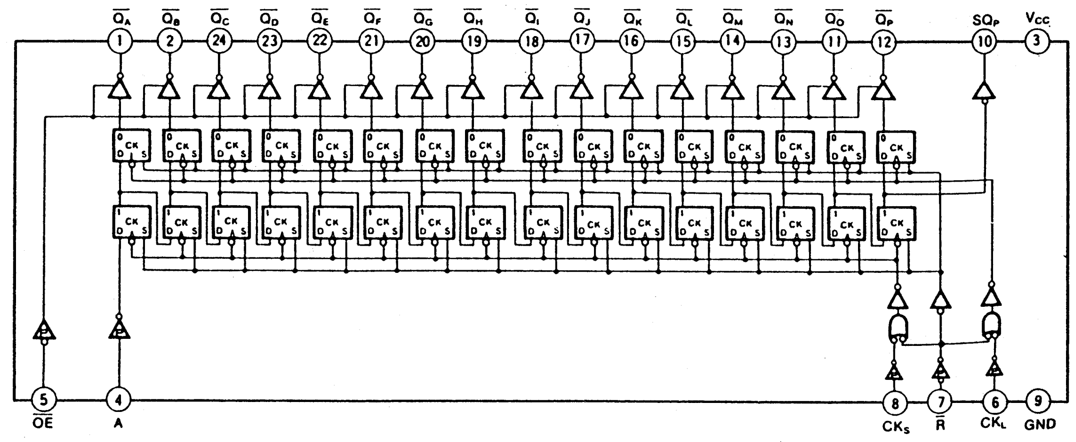
IC305 HD14053BFP


B1
B0
C1
C.COM
C0
INH
VEE
VSS
VDD
B.COM
A.COM
A1
A0
A
B
C
OPEN
OPEN
OPEN

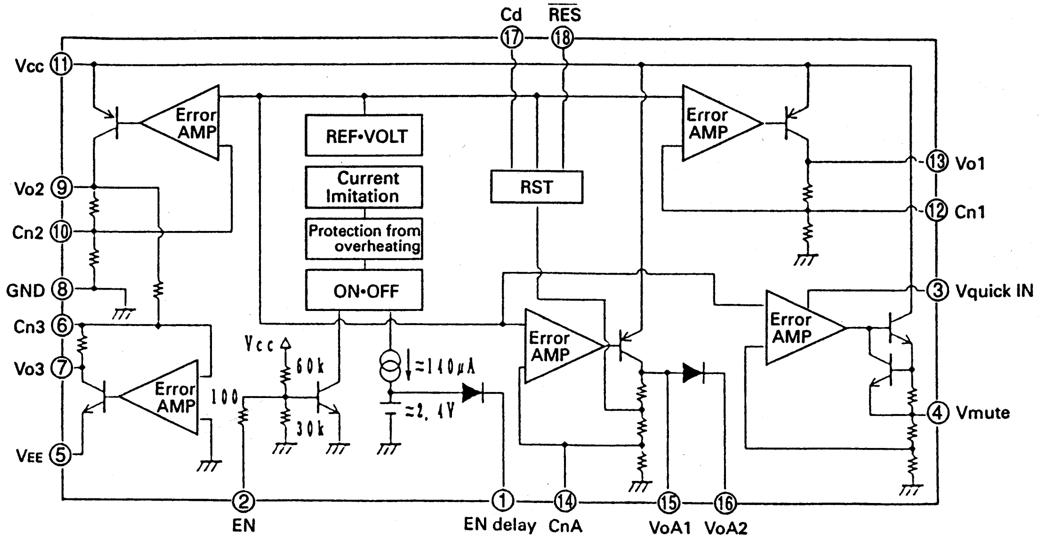
IC504 XR1091DCP


OUT 63
OUT 160
OUT 400
OUT 1k
OUT 2.5k
OUT 6.3k
OUT 16k
OUT SUM
63Hz BANDPASS FILTER
160Hz BANDPASS FILTER
400Hz BANDPASS FILTER
1kHz BANDPASS FILTER
2.5kHz BANDPASS FILTER
6.3kHz BANDPASS FILTER
16kHz BANDPASS FILTER
CLOCK GENERATOR
LOWPASS FILTER
Σ
Σ
Vss
CLK/2
CLK R
CLK C
GND
L IN
R IN
Vss

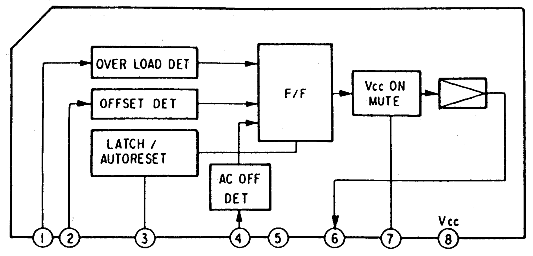
IC507 M66311FP


$\overline{Q_A}$
$\overline{Q_B}$
$\overline{Q_C}$
$\overline{Q_D}$
$\overline{Q_E}$
$\overline{Q_F}$
$\overline{Q_G}$
$\overline{Q_H}$
$\overline{Q_I}$
$\overline{Q_J}$
$\overline{Q_K}$
$\overline{Q_L}$
$\overline{Q_M}$
$\overline{Q_N}$
$\overline{Q_O}$
$\overline{Q_P}$
SQP
Vcc
D CK S
OE
A
CKS
R
CKL
GND

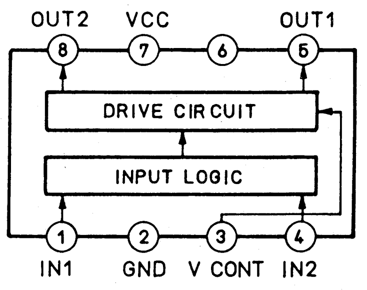
IC901 LA5603


Cd
RES
Vcc
Vo2
Cn2
GND
Cn3
Vo3
VEE
Vo1
Cn1
Vquick IN
Vmute
Error AMP
Error AMP
Error AMP
Error AMP
Error AMP
REF•VOLT
Current Imitation
Protection from overheating
ON•OFF
RST
Vcc
60k
30k
100
=140μA
=2.4V
EN
EN delay
CnA
VoA1
VoA2

IC701 μPC1237HA

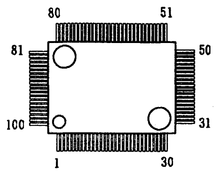

OVER LOAD DET
OFFSET DET
LATCH / AUTORESET
AC OFF DET
F/F
Vcc ON MUTE
Vcc

IC591 LB1639

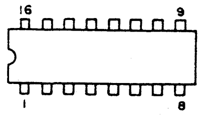

OUT2
VCC
OUT1
DRIVE CIRCUIT
INPUT LOGIC
IN1
GND
V CONT
IN2

3-2. SEMICONDUCTOR LEAD LAYOUTS

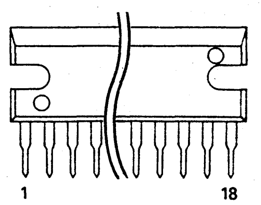
CXA1492QA


80
51
81
50
100
31
1
30

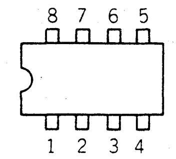
XR1091DCP



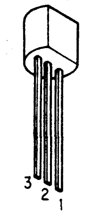
LA5603



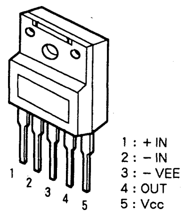
LB1639
LM393P
X24C01P



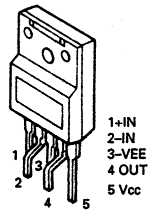
LM35DZ-SL



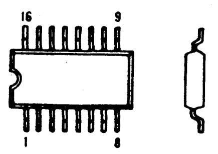
LM3875


1
2
3
4
5
1 : +IN
2 : −IN
3 : −VEE
4 : OUT
5 : Vcc

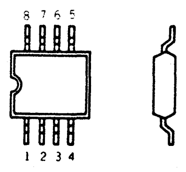
LM3875-1


1
2
3
4
5
1+IN
2-IN
3-VEE
4 OUT
5 Vcc

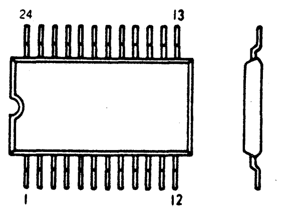
HD14053BFP
MC14052BF



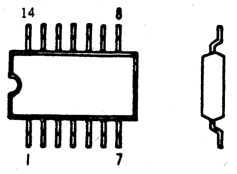
M5218AFP



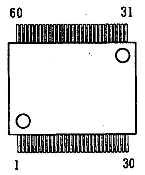
M66311FP



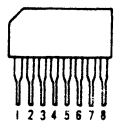
SN74HC04NS



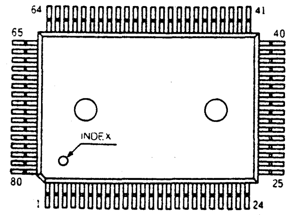
SN755703



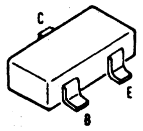
µPC1237HA



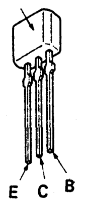
µPD78134-D29-3B9


64
41
65
40
80
25
1
24
INDEX

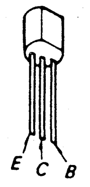
2SA1162-G
2SA1342
2SC3052-EF
2SC3396
2SC3624-L18



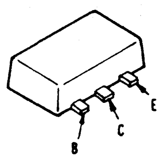
2SA1175-HFE
letter side



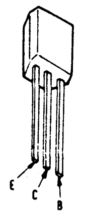
2SB1013-4
2SC1841-PAFAEA



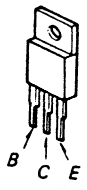
2SB1121-ST
2SD1622-S



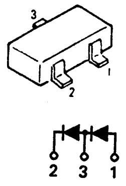
2SC2603-EF



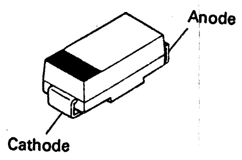
2SD2012



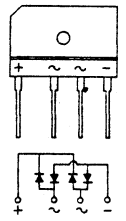
DCA010
1S2836



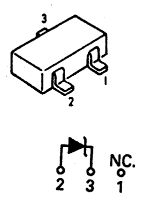
EC10DS2


Anode
Cathode

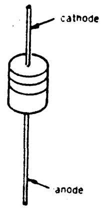
RBV-602-01



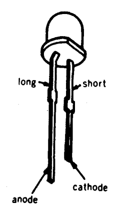
RD13M-B1
RD5.1M-B2
RD30M-B
RD36M-B



1SS120


cathode
anode

SEL2210S


long
short
anode
cathode

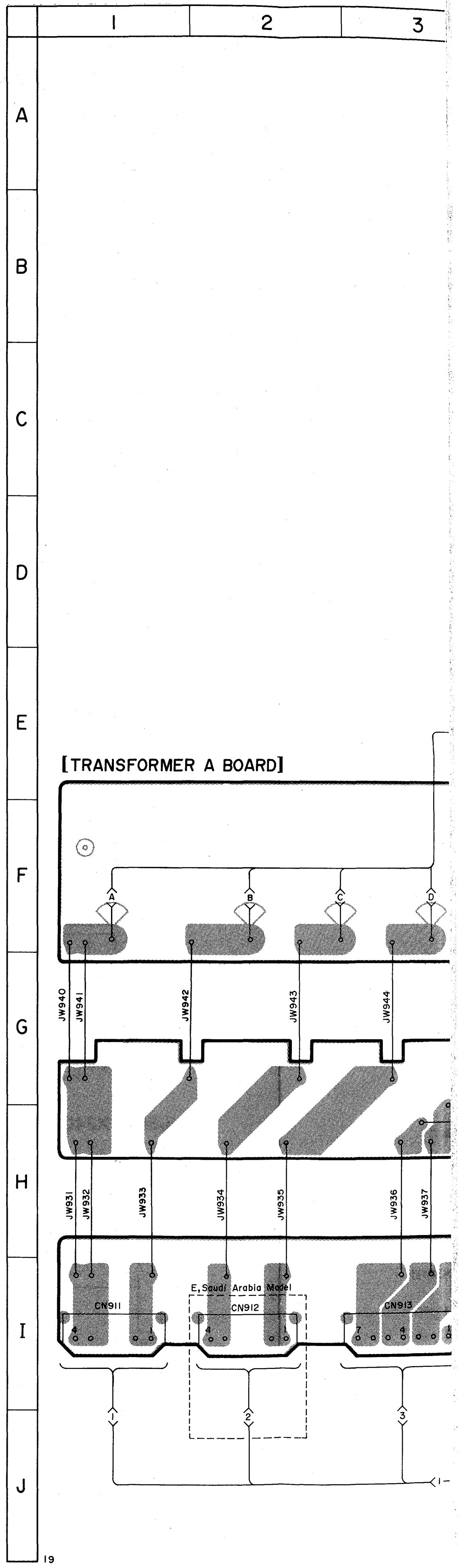
● SEMICONDUCTOR LOCATION

- MAIN BOARD

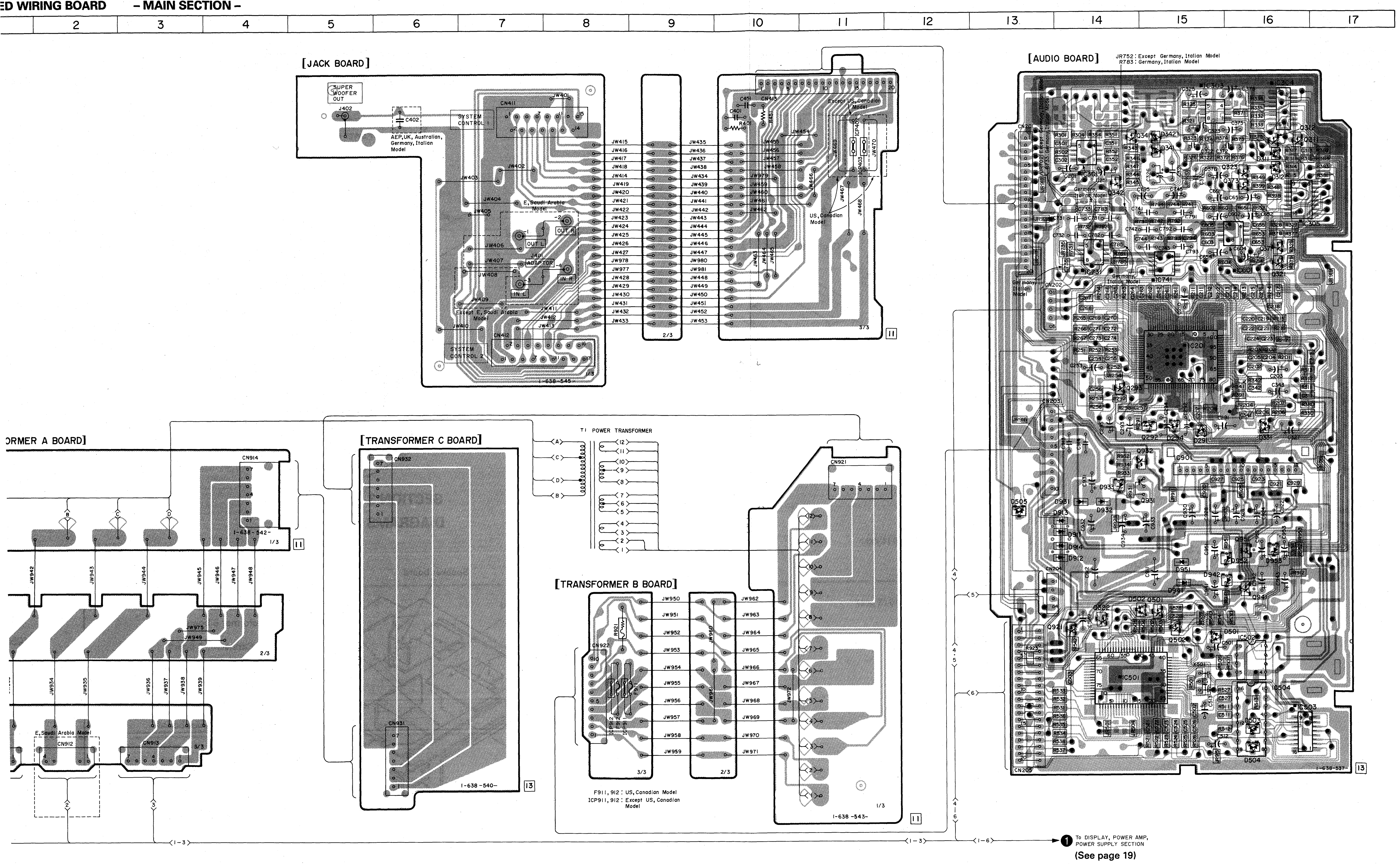
Ref. No	Location	Ref. No	Location
D291	E-15	Q292	E-15
D294	E-15	Q293	E-14
D311	B-16	Q311	B-17
D312	B-16	Q312	B-16
D331	E-16	Q321	C-16
D341	B-15	Q322	G-14
D342	B-15	Q323	B-16
D501	H-16	Q341	B-15
D502	G-14	Q342	B-14
D503	I-16	Q371	C-16
D504	I-16	Q373	B-16
D505	F-13	Q501	G-15
D911	F-14	Q502	H-15
D912	G-14	Q921	H-14
D913	F-14	Q931	F-15
D914	G-14	Q932	E-15
D931	F-14	Q941	G-16
D932	F-14	Q951	G-16
D933	F-14		
D941	G-15		
D942	G-15		
D951	G-15		
D952	G-16		
D953	G-16		
IC201	D-15		
IC301	B-14		
IC303	A-15		
IC304	A-16		
IC305	C-16		
IC501	H-14		
IC502	H-16		
IC503	H-16		
IC504	H-16		
IC601	C-16		
IC731	C-14		
IC741	C-15		
IC901	F-15		

Note:
- o——: indicated a lead wire mounted on the component side.
- ■ : parts mounted on the conductor side.
- ● : Through hole.
- ▨ : Pattern from the side which enables seeing.
- ░ : Pattern of the rear side.

3-4. PRINTED WIRING BOARD - MAIN

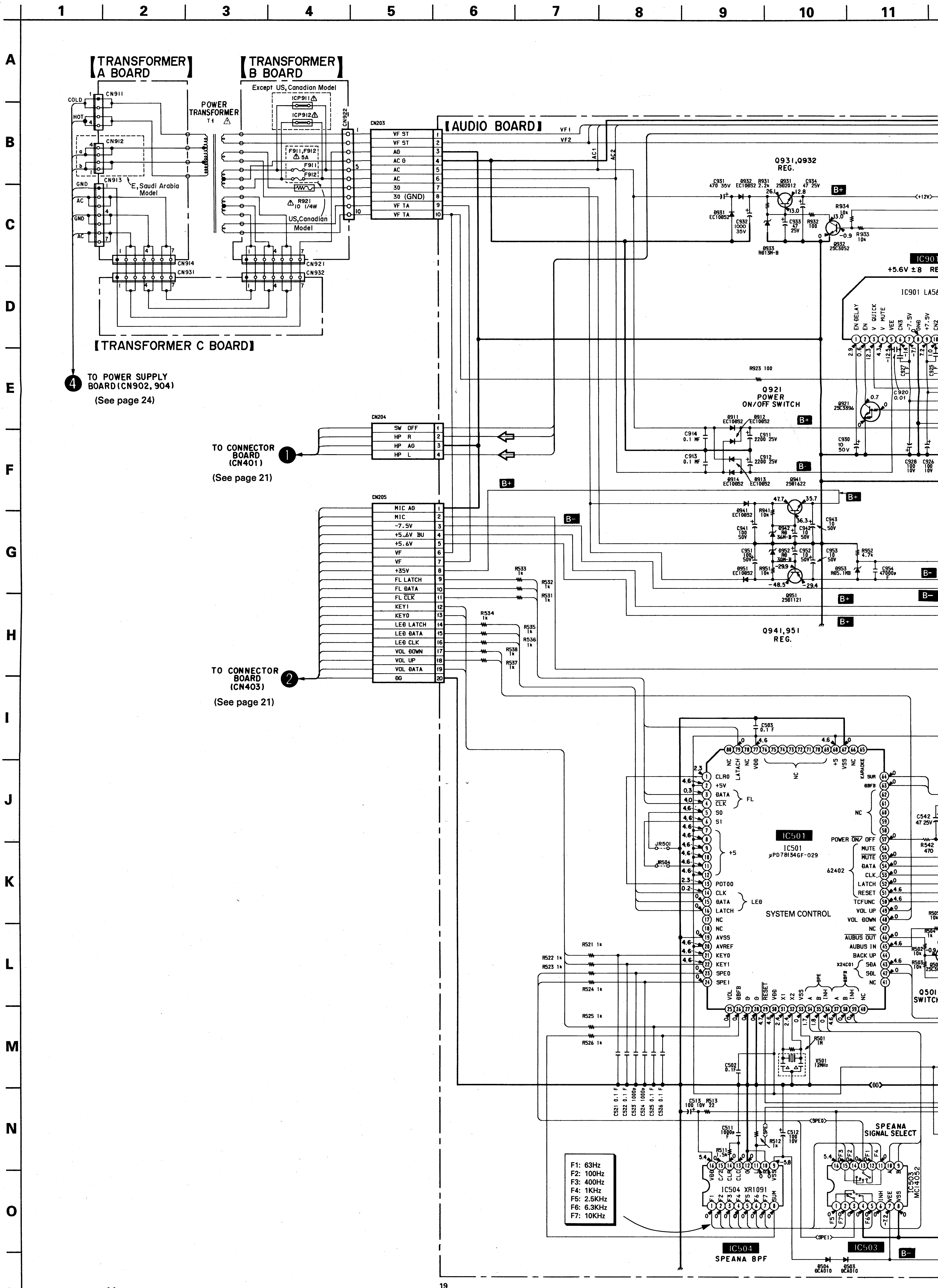

1
2
3
A
B
C
D
E
F
G
H
I
J
[TRANSFORMER A BOARD]
JW940
JW941
JW942
JW943
JW944
JW931
JW932
JW933
JW934
JW935
JW936
JW937
CN911
E,Saudi Arabia Model
CN912
CN913
1
2
3
19

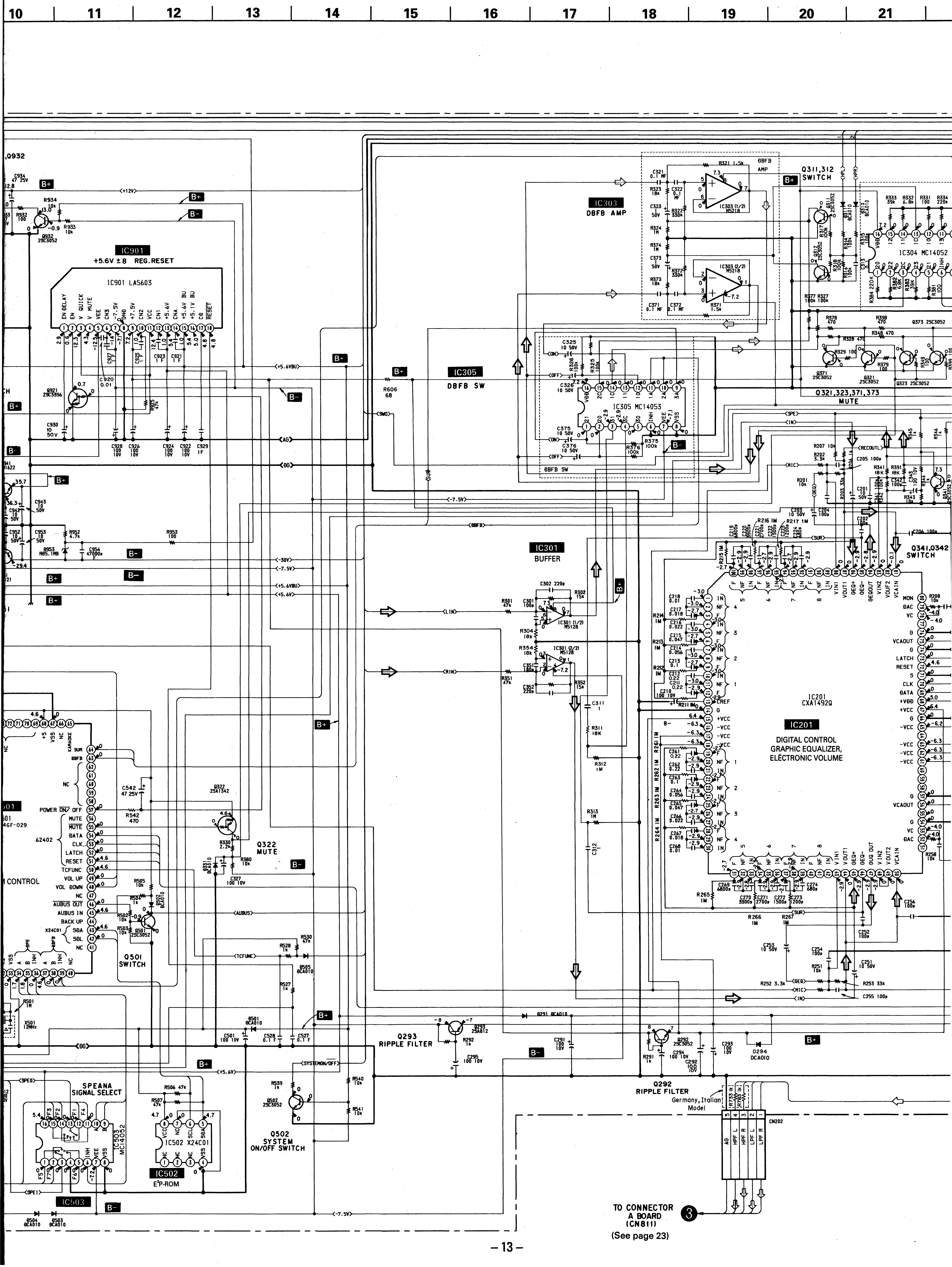
ED WIRING BOARD - MAIN SECTION -

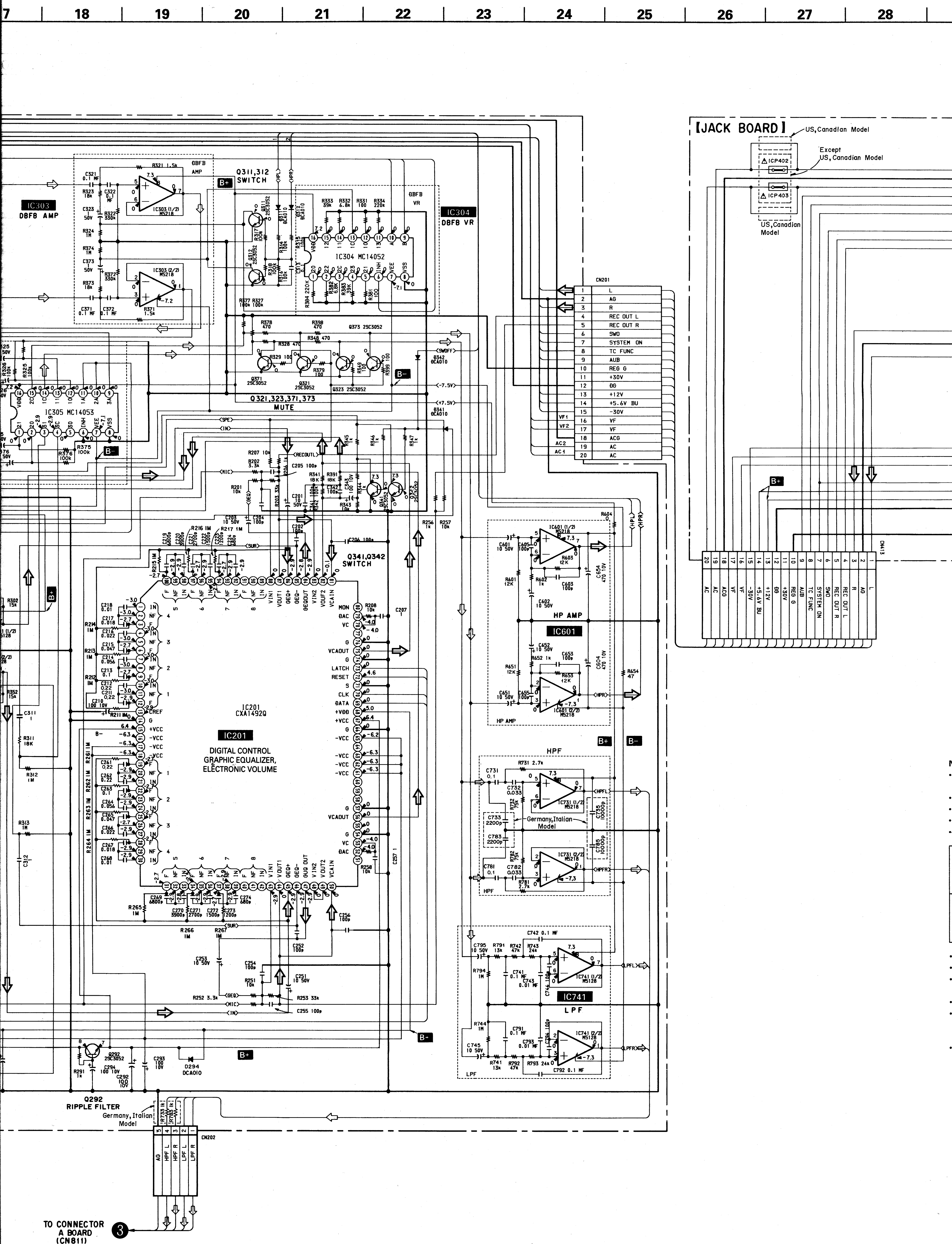

2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
[JACK BOARD]
SUPER WOOFER OUT
J402
C402
AEP, UK, Australian, Germany, Italian Model
SYSTEM CONTROL 1
CN411
E, Saudi Arabia Model
OUT R
OUT L
J401 ADAPTOR
IN R
IN L
Except E, Saudi Arabia Model
SYSTEM CONTROL 2
CN412
1-638-545-
2/3
Except US, Canadian Model
US, Canadian Model
CN413
3/3
11
[AUDIO BOARD]
JR752 : Except Germany, Italian Model
R783 : Germany, Italian Model
Germany, Italian Model
IC201
IC301
IC501
IC901
1-638-537-
13
T1 POWER TRANSFORMER
ORMER A BOARD]
CN914
1-638-542-
1/3
11
2/3
E, Saudi Arabia Model
CN912
CN913
3/3
[TRANSFORMER C BOARD]
CN932
CN931
1-638-540-
13
[TRANSFORMER B BOARD]
CN921
CN922
F911, 912 : US, Canadian Model
ICP911, 912 : Except US, Canadian Model
3/3
2/3
1/3
1-638-543-
11
(1-3)
(1-6)

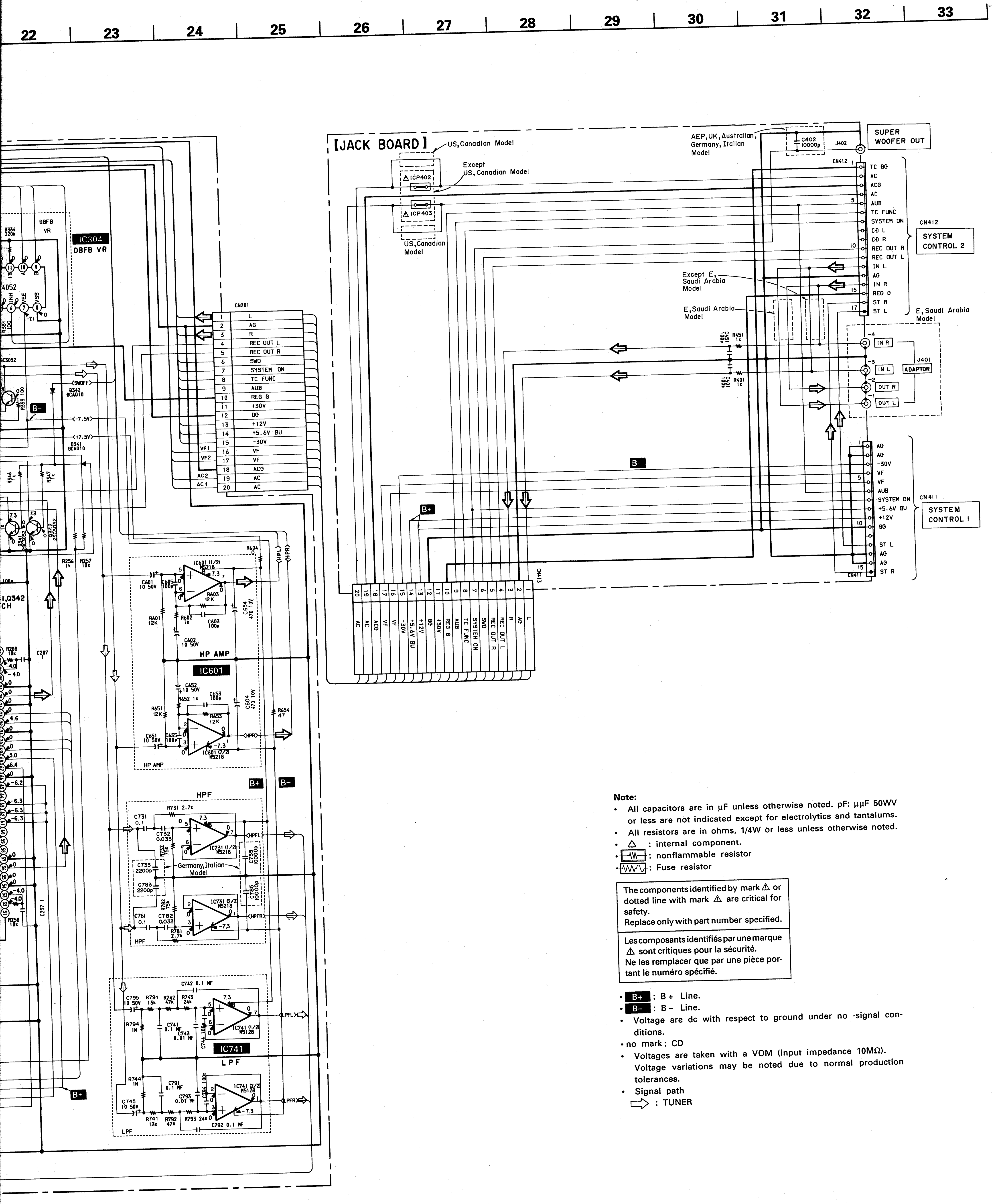
❶ To DISPLAY, POWER AMP, POWER SUPPLY SECTION
(See page 19)

3-5. SCHEMATIC DIAGRAM - MAIN SECTION -


1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
TRANSFORMER A BOARD
TRANSFORMER B BOARD
Except US, Canadian Model
ICP911
ICP912
POWER TRANSFORMER T1
CN911
COLD
HOT
CN912
E, Saudi Arabia Model
CN913
GND
AC
F911, F912 5A
R921 10 1/4W
US, Canadian Model
CN922
CN914
CN931
CN921
CN932
TRANSFORMER C BOARD
TO POWER SUPPLY BOARD (CN902, 904)
(See page 24)
AUDIO BOARD
CN203
VF ST
AG
AC G
AC
30
30 (GND)
VF TA
VF1
VF2
AC1
AC2
Q931, Q932 REG.
B+
B-
IC901
+5.6V ±8
IC901 LA56
R923 100
Q921 POWER ON/OFF SWITCH
CN204
SW OFF
HP R
HP AG
HP L
TO CONNECTOR BOARD (CN401)
(See page 21)
CN205
MIC AG
MIC
-7.5V
+5.6V BU
+5.6V
VF
+35V
FL LATCH
FL DATA
FL CLK
KEY1
KEY0
LED LATCH
LED DATA
LED CLK
VOL DOWN
VOL UP
VOL DATA
DG
TO CONNECTOR BOARD (CN403)
(See page 21)
Q941, 951 REG.
IC501
μPD78134GF-029
SYSTEM CONTROL
CLRO
+5V
DATA
CLK
S0
S1
FL
POTOO
LATCH
LED
AVSS
AVREF
KEY0
KEY1
SPEO
SPE1
POWER ON/OFF
MUTE
DATA
CLK
RESET
TCFUNC
VOL UP
VOL DOWN
AUBUS OUT
AUBUS IN
BACK UP
SDA
SDL
62402
X24C01
KARAOKE
Q501 SWITCH
X501 12MHz
R501 1M
SPEANA SIGNAL SELECT
IC504 XR1091
IC504 SPEANA BPF
IC503 MC14052
IC503
F1: 63Hz
F2: 100Hz
F3: 400Hz
F4: 1KHz
F5: 2.5KHz
F6: 6.3KHz
F7: 10KHz


10
11
12
13
14
15
16
17
18
19
20
21
Q932
Q932 2SC3052
IC901
+5.6V ± 8 REG.RESET
IC901 LA5603
EN DELAY
EN
V QUICK
V MUTE
VEE
CN3
-7.5V
GND
+7.5V
CN2
VCC
CN1
+5.6V
CNA
+5.6V BU
+5.1V BU
CO
RESET
Q921 2SC3596
IC303
DBFB AMP
IC303 (1/2) M5218
IC303 (2/2) M5218
DBFB AMP
Q311,312 SWITCH
IC304 MC14052
IC305
DBFB SW
IC305 MC14053
DBFB SW
Q371 2SC3052
Q321 2SC3052
Q323 2SC3052
Q373 2SC3052
Q321,323,371,373 MUTE
Q341,Q342 SWITCH
IC301
BUFFER
IC301 (1/2) M5128
IC301 (2/2) M5128
IC201 CXA1492Q
IC201
DIGITAL CONTROL GRAPHIC EQUALIZER, ELECTRONIC VOLUME
Q322 2SA1342
Q322 MUTE
Q501 2SC3052
Q501 SWITCH
Q293 2SA812
Q293 RIPPLE FILTER
Q292 2SC3052
Q292 RIPPLE FILTER
Germany, Italian Model
Q502 2SC3052
Q502 SYSTEM ON/OFF SWITCH
SPEANA SIGNAL SELECT
IC503 MC14052
IC503
IC502 X24C01
IC502
E²P-ROM
CN202
AG
HPF L
HPF R
LPF L
LPF R
KARAOKE
SUR
DBFB
NC
POWER ON/OFF
MUTE
DATA
CLK
LATCH
RESET
TCFUNC
VOL UP
VOL DOWN
AUBUS OUT
AUBUS IN
BACK UP
X24C01
SDA
SDL
X501 12MHz
B+
B-
<+12V>
<+5.6VBU>
<+5.6V>
<-7.5V>
<-30V>
<AG>
<DG>
<SWD>
<LIN>
<RIN>
<DBFB>
<SUR>
<SPE>
<IN>
<MIC>
<GEQ>
<RECOUT>
<AUBUS>
<TCFUNC>
<SYSTEMON/OFF>
<SPE0>
<SPE1>
<ON>
<OFF>
D291 DCA010
D294 DCA010
D501 DCA010
D503 DCA010
D504 DCA010
D505 DCA010
R606 68
TO CONNECTOR A BOARD (CN811)
(See page 23)


17
18
19
20
21
22
23
24
25
26
27
28
IC303
DBFB AMP
DBFB AMP
IC303 (1/2) M5218
IC303 (2/2) M5218
Q311,312 SWITCH
DBFB VR
IC304
DBFB VR
IC304 MC14052
IC305 MC14053
Q321,323,371,373
MUTE
Q341,Q342 SWITCH
IC201
CXA1492Q
DIGITAL CONTROL GRAPHIC EQUALIZER, ELECTRONIC VOLUME
IC601
HP AMP
IC601 (1/2) M5218
IC601 (2/2) M5218
HPF
IC731 (1/2) M5218
IC731 (2/2) M5218
Germany, Italian Model
IC741
LPF
IC741 (1/2) M5128
IC741 (2/2) M5128
Q292
RIPPLE FILTER
Germany, Italian Model
CN202
AG
HPF L
HPF R
LPF L
LPF R
TO CONNECTOR A BOARD (CN811)
(See page 23)
【JACK BOARD】
US, Canadian Model
Except US, Canadian Model
ICP402
ICP403
CN201
1 L
2 AG
3 R
4 REC OUT L
5 REC OUT R
6 SWD
7 SYSTEM ON
8 TC FUNC
9 AUB
10 REG G
11 +30V
12 DG
13 +12V
14 +5.6V BU
15 -30V
16 VF
17 VF
18 ACG
19 AC
20 AC
CN413
B+
B-


22
23
24
25
26
27
28
29
30
31
32
33
【JACK BOARD】
US,Canadian Model
Except US,Canadian Model
US,Canadian Model
ICP402
ICP403
AEP,UK,Australian, Germany,Italian Model
C402 10000p
J402
SUPER WOOFER OUT
CN412
SYSTEM CONTROL 2
Except E, Saudi Arabia Model
E,Saudi Arabia Model
R451 1k
C451 100p
R401 1k
C401 100p
IN R
IN L
OUT R
OUT L
J401
ADAPTOR
CN411
SYSTEM CONTROL I
CN413
CN201
IC304
DBFB VR
IC601
HP AMP
IC601 (1/2) M5218
IC601 (2/2) M5218
HPF
IC731 (1/2) M5218
IC731 (2/2) M5218
Germany,Italian Model
IC741
LPF
IC741 (1/2) M5128
IC741 (2/2) M5128
B+
B-
HPL
HPR
HPFL
HPFR
LPFL
LPFR
L
AG
R
REC OUT L
REC OUT R
SWO
SYSTEM ON
TC FUNC
AUB
REG G
+30V
BG
+12V
+5.6V BU
-30V
VF
ACG
AC
ST L
ST R
IN L
IN R
CD L
CD R

Note:

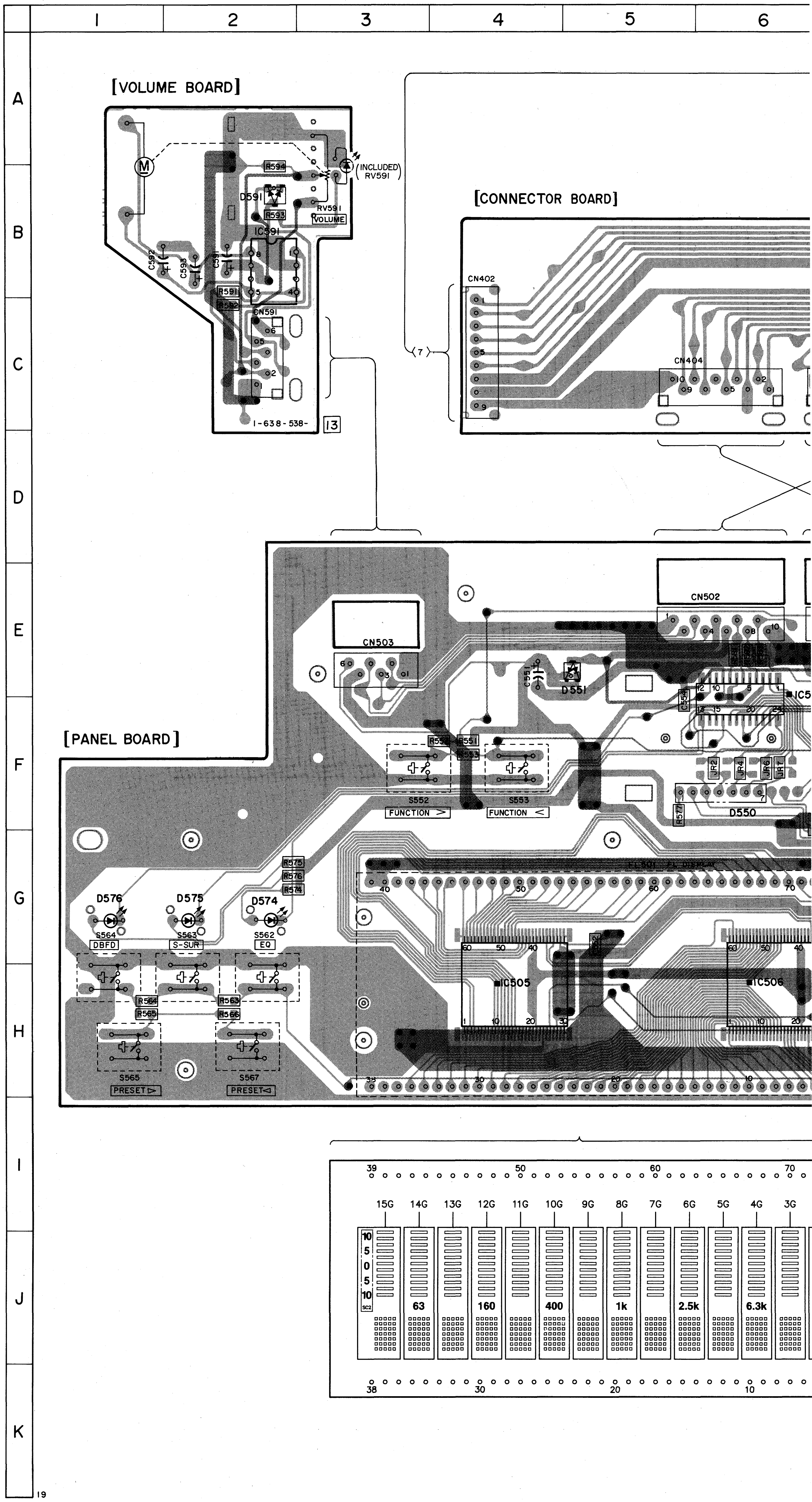
- All capacitors are in µF unless otherwise noted. pF: µµF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, 1/4W or less unless otherwise noted.
- △ : internal component.
- : nonflammable resistor
- : Fuse resistor

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

- B+ : B + Line.
- B- : B − Line.
- Voltage are dc with respect to ground under no -signal conditions.
- no mark : CD
- Voltages are taken with a VOM (input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path
  ⇨ : TUNER

3-6. PRINTED WIRING BOARD - PANEL, POWER SECTION -



1
2
3
4
5
6
A
B
C
D
E
F
G
H
I
J
K
[VOLUME BOARD]
M
R594
D591
R593
IC591
RV591
VOLUME
INCLUDED RV591
C592
C593
C591
R591
R592
CN591
1-638-538-
13
[CONNECTOR BOARD]
CN402
CN404
7
CN502
CN503
C551
D551
D550
C554
JR2
JR4
JR6
JR7
R577
R552
R551
R553
S552
FUNCTION >
S553
FUNCTION <
[PANEL BOARD]
R575
R576
R574
D576
D575
D574
S564
DBFD
S563
S-SUR
S562
EQ
R564
R565
R563
R566
S565
PRESET▷
S567
PRESET◁
IC505
IC506
15G
14G
13G
12G
11G
10G
9G
8G
7G
6G
5G
4G
3G
10
5
0
5
10
63
160
400
1k
2.5k
6.3k
39
50
60
70
38
30
20
10
19

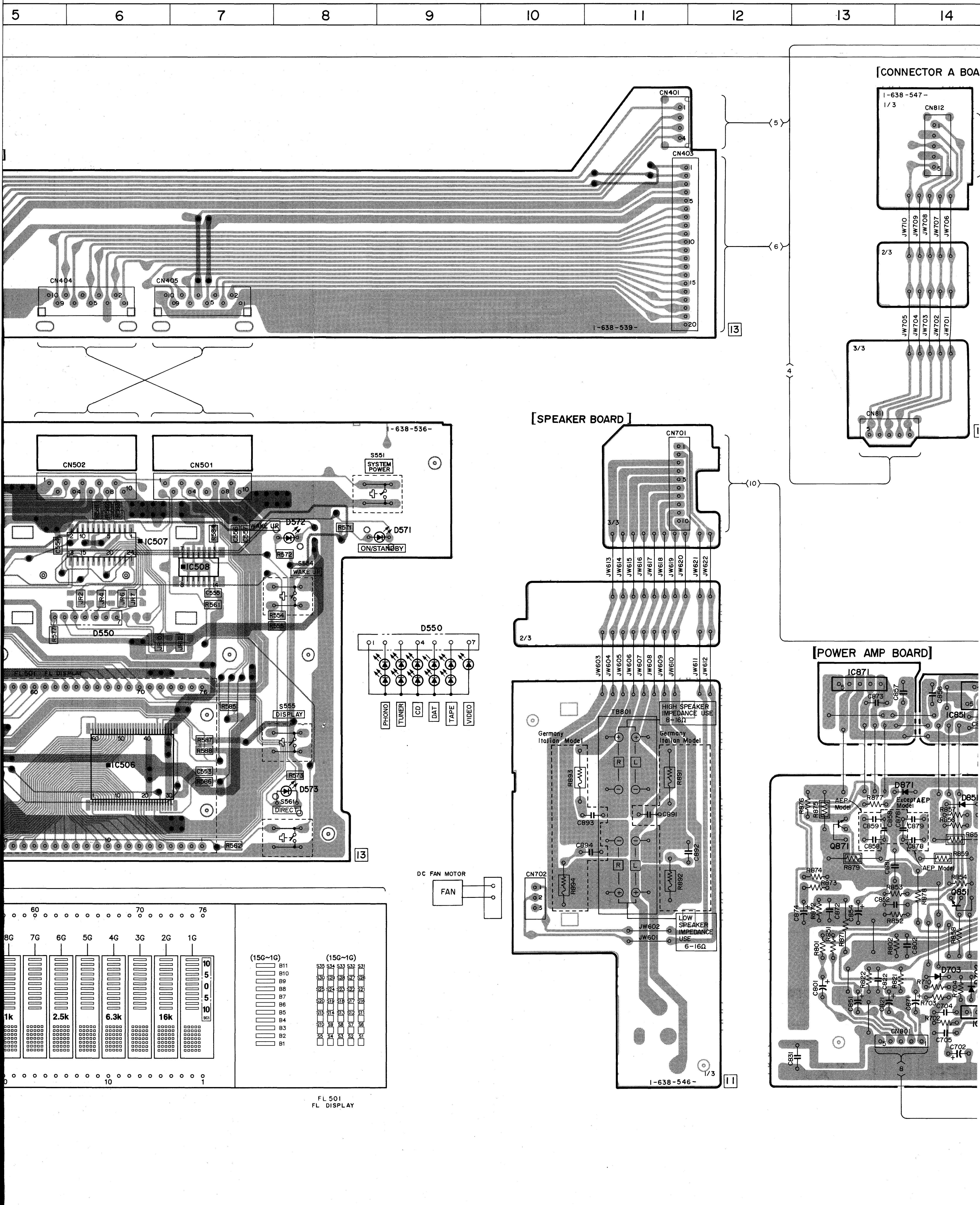
● SEMICONDUCTOR LOCATION

• PANEL/POWER BOARD

Ref. No	Location	Ref. No	Location
D550	F-6	IC505	H-4
D551	E-5	IC506	H-6
D571	E-9	IC507	E-6
D572	E-8	IC508	F-7
D573	H-8	IC591	B-2
D574	G-2	IC701	J-14
D575	G-2	IC702	H-15
D576	G-1	IC703	G-15
D591	B-2	IC801	G-15
D701	J-15	IC821	G-17
D702	J-14	IC851	G-14
D703	J-14	IC871	G-13
D704	I-15		
D705	I-15	Q611	C-21
D706	H-15	Q612	C-21
		Q701	J-15
D801	H-16	Q702	C-20
D802	I-16	Q801	I-16
D811	K-21		H-17
D812	K-20	Q821	
D821	H-16	Q851	I-14
		Q871	H-13
D822	I-16		
D851	H-14		
D852	I-15		
D871	H-14		
D872	I-16		
D901	E-21		
D902	D-22		
D903	D-22		

Note:

- ○——: indicated a lead wire mounted on the component side.
- ■ : parts mounted on the conductor side.
- ● : Through hole.
- ▨ : Pattern from the side which enables seeing.
- ░ : Pattern of the rear side.



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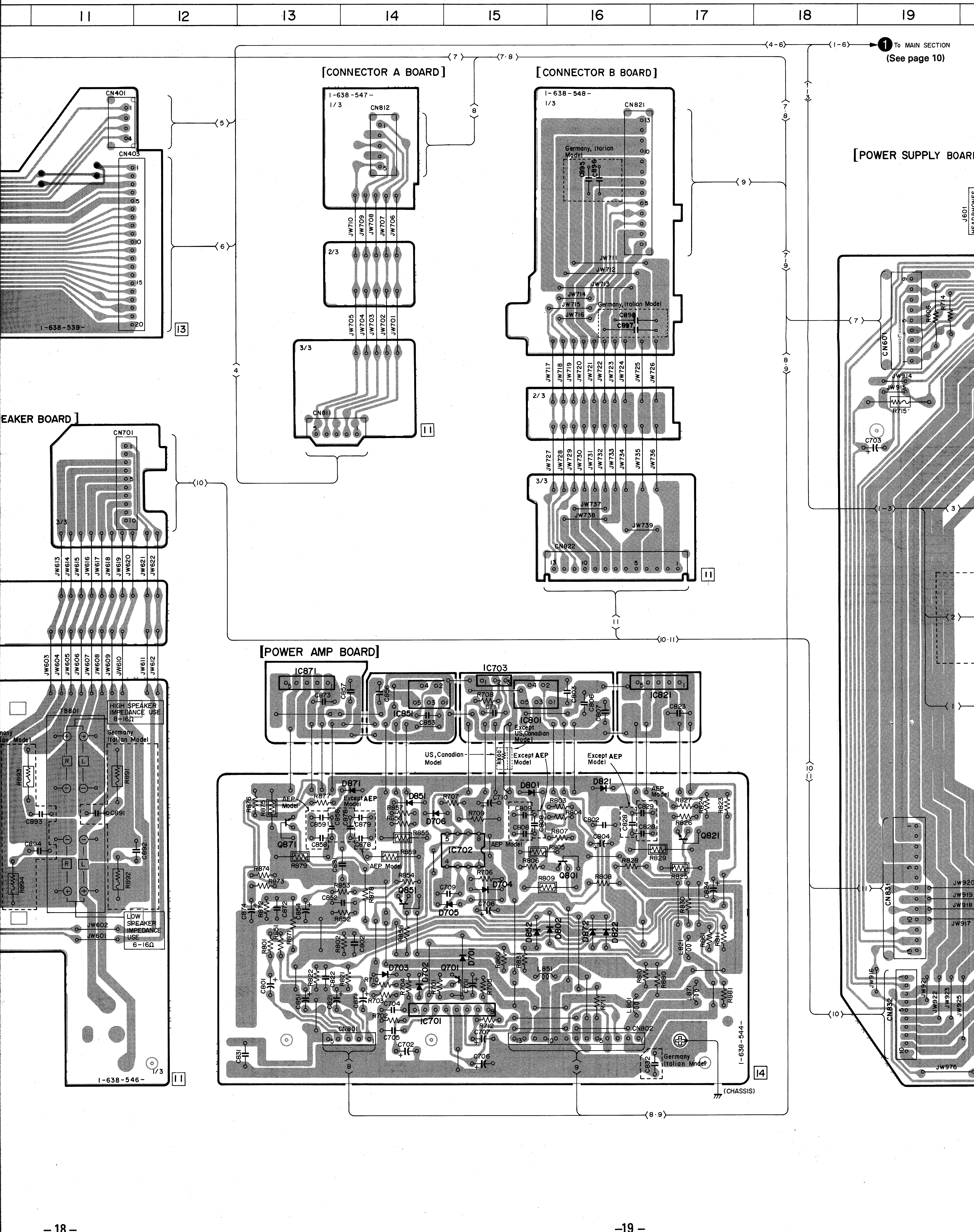
14
[CONNECTOR A BOA
1-638-547-
1/3
CN812
2/3
3/3
CN811
JW710
JW709
JW708
JW707
JW706
JW705
JW704
JW703
JW702
JW701
CN401
CN403
CN404
CN405
1-638-539-
13
(5)
(6)
4
[SPEAKER BOARD]
CN701
3/3
2/3
1/3
(10)
JW613
JW614
JW615
JW616
JW617
JW618
JW619
JW620
JW621
JW622
JW603
JW604
JW605
JW606
JW607
JW608
JW609
JW610
JW611
JW612
TB801
HIGH SPEAKER IMPEDANCE USE 8–16Ω
Germany Italian Model
R893
R891
C893
C891
C894
C892
R894
R892
CN702
LOW SPEAKER IMPEDANCE USE 6–16Ω
JW602
JW601
1-638-546-
11
DC FAN MOTOR
FAN
1-638-536-
S551
SYSTEM POWER
CN502
CN501
IC507
IC508
WAKE UP
D572
D571
R571
ON/STANDBY
R572
S554
WAKE UP
R554
R561
C555
R584
JR2
JR4
JR6
JR7
D550
R577
FL501 FL DISPLAY
R585
S555
DISPLAY
R587
R588
IC506
C553
R586
R573
D573
S561
DIRECT
R562
13
D550
PHONO
TUNER
CD
DAT
TAPE
VIDEO
[POWER AMP BOARD]
IC871
C873
C857
C856
IC851
D871
AEP Model
Except AEP Model
R876
R875
R877
C859
C858
C878
C879
C881
R857
R858
D851
Q871
R879
R859
AEP Model
R874
R873
R853
R878
R854
Q851
C874
R872
C872
C854
C852
R852
R801
R851
R871
R802
C802
R858
D703
R710
R703
C801
C851
R822
C822
C821
C871
C704
R702
C705
C702
CN801
C831
8
60
70
76
8G
7G
6G
5G
4G
3G
2G
1G
1k
2.5k
6.3k
16k
10
5
0
5
10
SC1
(15G~1G)
B11
B10
B9
B8
B7
B6
B5
B4
B3
B2
B1
(15G~1G)
S35 S34 S33 S32 S31
S30 S29 S28 S27 S26
S25 S24 S23 S22 S21
S20 S19 S18 S17 S16
S15 S14 S13 S12 S11
S10 S9 S8 S7 S6
S5 S4 S3 S2 S1
10
1

FL 501
FL DISPLAY


11
12
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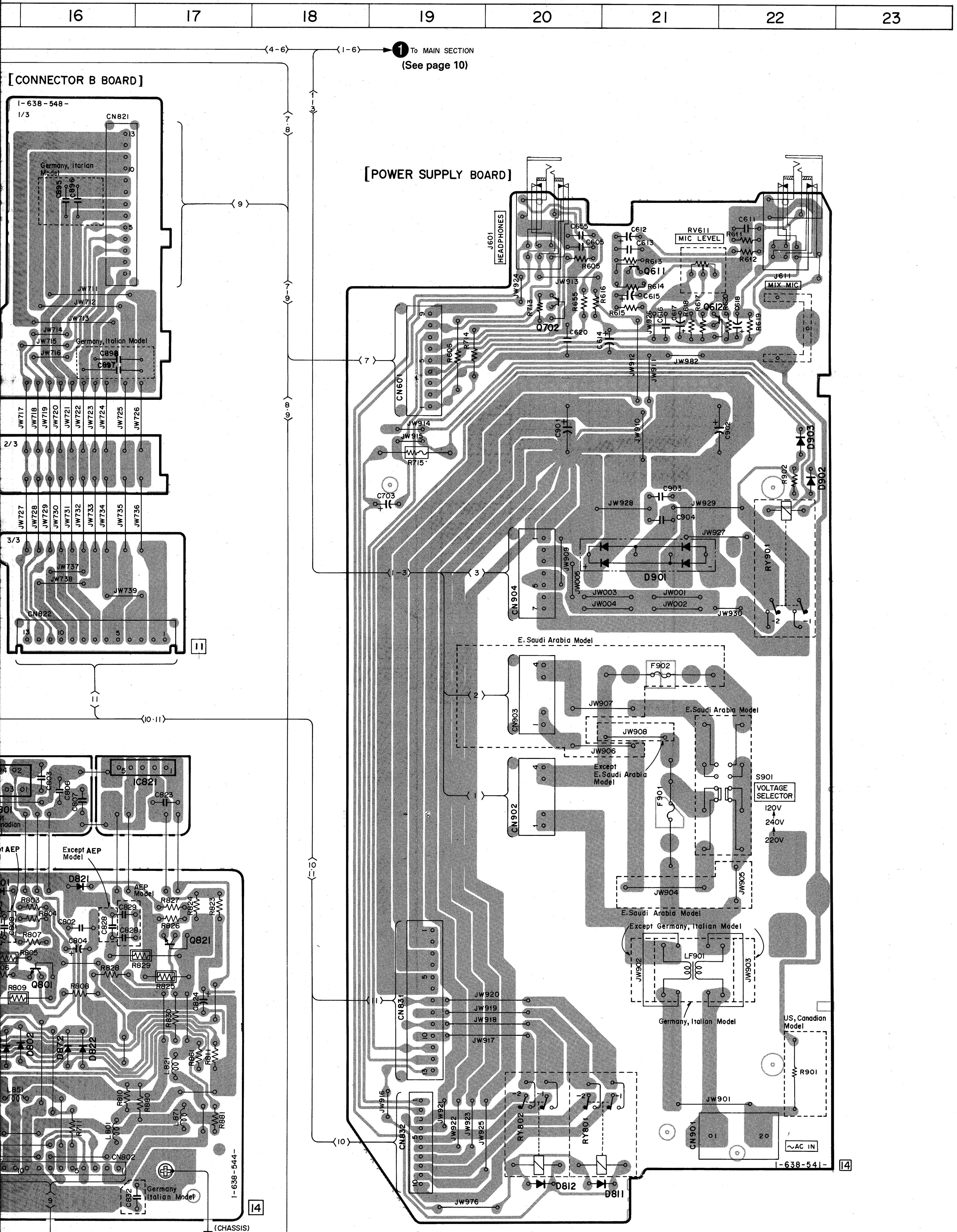
14
15
16
17
18
19
To MAIN SECTION (See page 10)
[CONNECTOR A BOARD]
1-638-547-
1/3
2/3
3/3
CN812
CN811
JW701
JW702
JW703
JW704
JW705
JW706
JW707
JW708
JW709
JW710
[CONNECTOR B BOARD]
1-638-548-
CN821
CN822
Germany, Italian Model
C895
C896
C897
C898
JW711
JW712
JW713
JW714
JW715
JW716
JW717
JW718
JW719
JW720
JW721
JW722
JW723
JW724
JW725
JW726
JW727
JW728
JW729
JW730
JW731
JW732
JW733
JW734
JW735
JW736
JW737
JW738
JW739
CN401
CN403
1-638-539-
13
EAKER BOARD]
CN701
JW601
JW602
JW603
JW604
JW605
JW606
JW607
JW608
JW609
JW610
JW611
JW612
JW613
JW614
JW615
JW616
JW617
JW618
JW619
JW620
JW621
JW622
TB801
HIGH SPEAKER IMPEDANCE USE 8-16Ω
LOW SPEAKER IMPEDANCE USE 6-16Ω
Germany Italian Model
R891
R892
R893
R894
C891
C892
C893
C894
1-638-546-
[POWER AMP BOARD]
IC871
IC851
IC703
IC801
IC821
IC702
IC701
Except US,Canadian Model
US,Canadian Model
Except AEP Model
AEP Model
Q701
Q801
Q821
Q851
Q871
D701
D702
D703
D704
D705
D706
D801
D802
D821
D822
D851
D852
D871
D872
L801
L821
L851
L871
CN801
CN802
CN831
CN832
1-638-544-
14
(CHASSIS)
[POWER SUPPLY BOAR
J601
CN601
JW914
JW915
JW916
JW917
JW918
JW919
JW920
JW921
JW922
JW923
JW925
JW976
R715
C703
R606
R714

16
17
18
19
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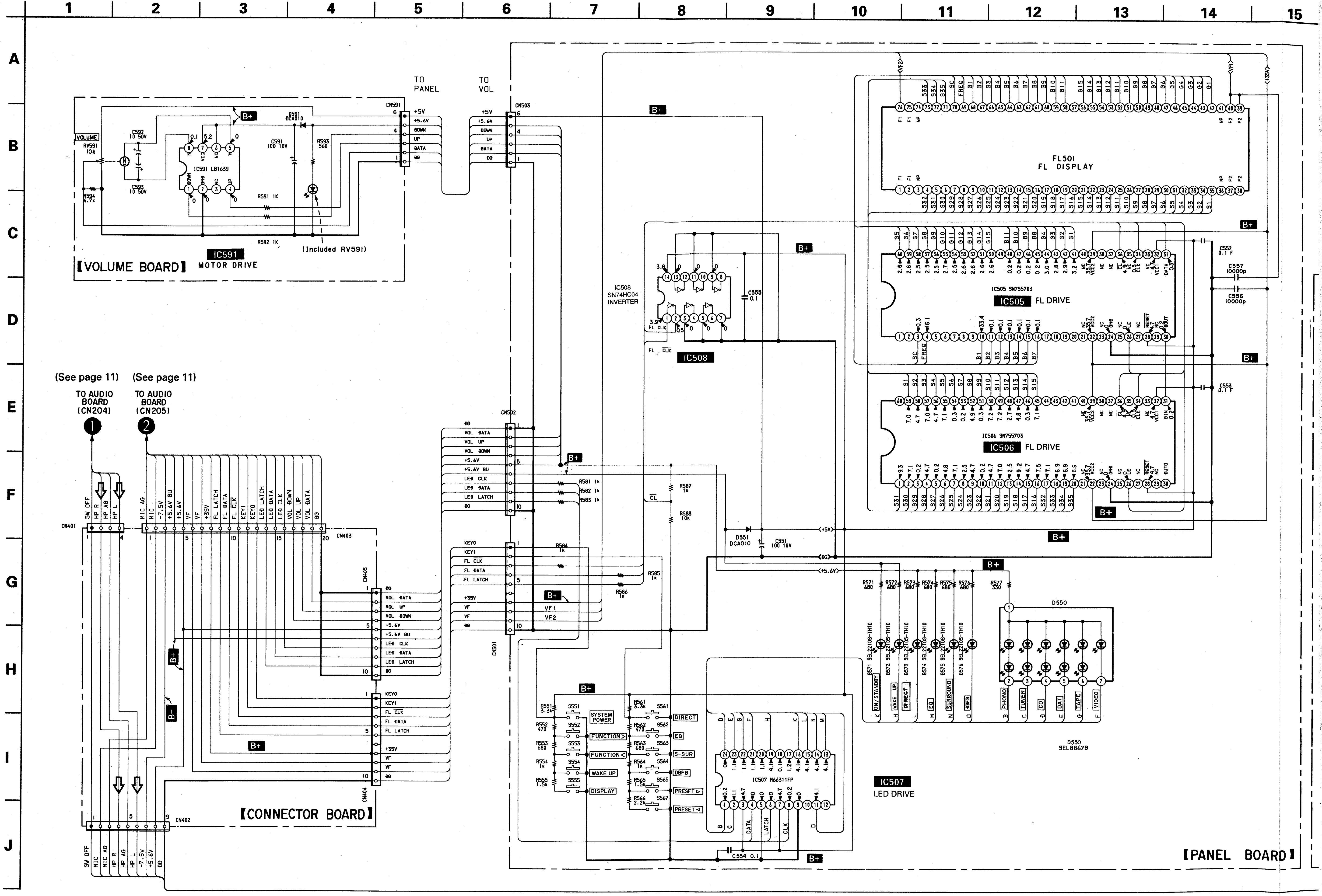
22
23
To MAIN SECTION
(See page 10)
[CONNECTOR B BOARD]
1-638-548-
1/3
2/3
3/3
CN821
CN822
Germany, Italian Model
C895
C896
C897
C898
JW711
JW712
JW713
JW714
JW715
JW716
JW717
JW718
JW719
JW720
JW721
JW722
JW723
JW724
JW725
JW726
JW727
JW728
JW729
JW730
JW731
JW732
JW733
JW734
JW735
JW736
JW737
JW738
JW739
11
IC821
C823
C803
C806
C807
Except AEP Model
AEP Model
D821
R803
R804
R827
R824
R823
R826
C802
C804
C828
C829
R807
R805
Q821
R828
R829
R825
Q801
R809
R808
C824
R830
L821
R861
R871
D822
D872
D802
L851
R810
R880
R881
R711
L871
L801
CN802
C832
Germany Italian Model
1-638-544-
14
(CHASSIS)
[POWER SUPPLY BOARD]
J601
HEADPHONES
C655
C605
C612
C613
R605
R613
Q611
RV611
MIC LEVEL
C611
R611
R612
J611
MIX MIC
JW924
JW913
R713
R655
R616
R614
C615
R615
R617
R618
R620
Q612
C616
C617
C618
R619
JW926
Q702
C620
C614
R606
R714
CN601
JW912
JW911
JW982
JW914
JW915
R715
C901
JW910
C902
D903
R902
D902
C703
C903
JW928
JW929
C904
JW927
JW909
JW005
D901
RY901
CN904
JW003
JW004
JW001
JW002
JW930
E. Saudi Arabia Model
F902
CN903
JW907
E.Saudi Arabia Model
JW908
JW906
Except E.Saudi Arabia Model
F901
S901
VOLTAGE SELECTOR
120V
240V
220V
CN902
JW904
JW905
E.Saudi Arabia Model
Except Germany, Italian Model
LF901
JW902
JW903
Germany, Italian Model
CN831
JW920
JW919
JW918
JW917
US, Canadian Model
R901
JW901
JW916
JW921
JW922
JW923
JW925
CN832
RY802
RY801
D812
D811
JW976
CN901
~AC IN
1-638-541-
14

3-7. SCHEMATIC DIAGRAM – PANEL, POWER SECTION –


1
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3
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7
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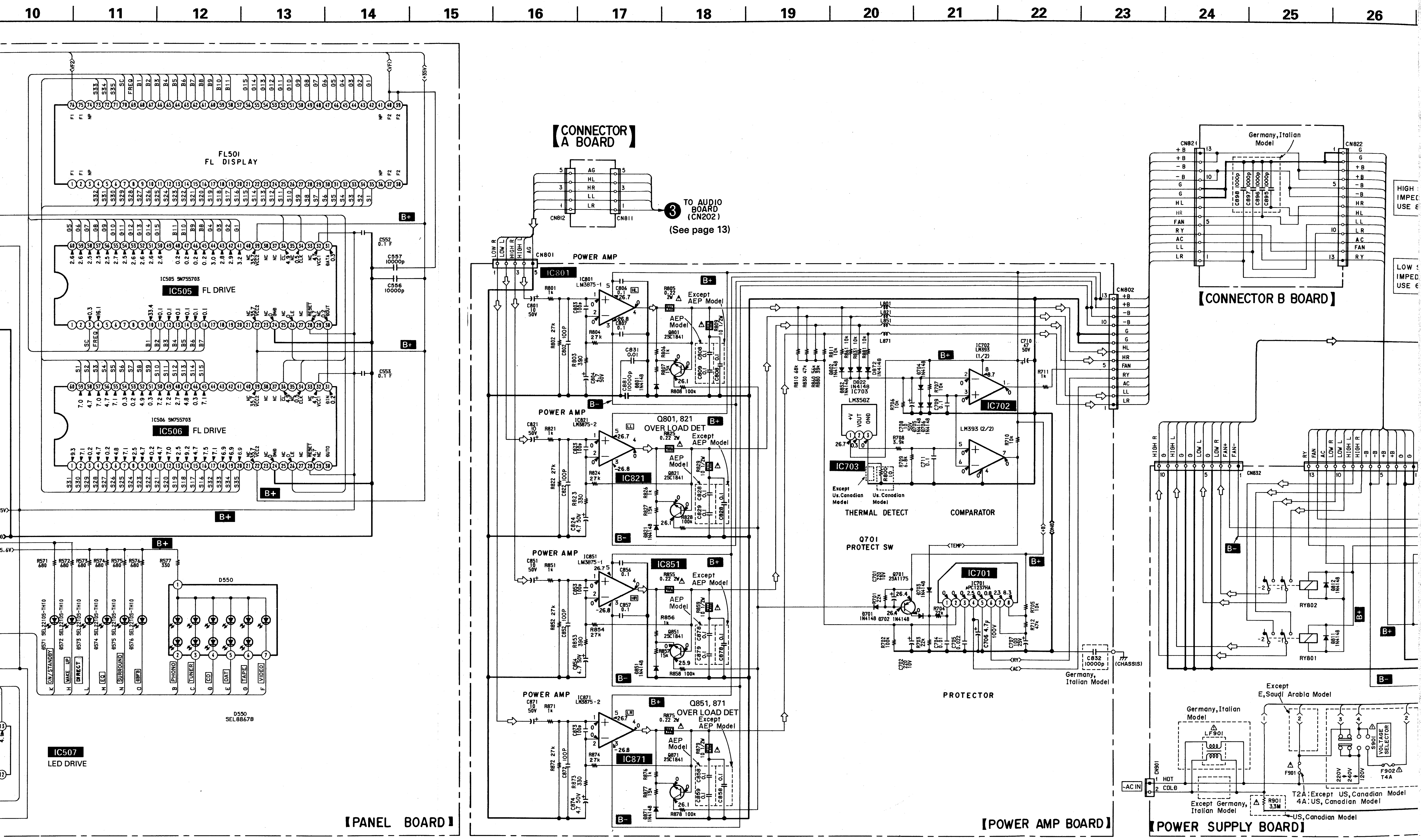
9
10
11
12
13
14
15
A
B
C
D
E
F
G
H
I
J
TO PANEL
TO VOL
VOLUME
RV591 10k
C592 10 50V
C593 10 50V
R594 4.7k
IC591 LB1639
D591 DCA010
C591 100 10V
R593 560
R591 1K
R592 1K
(Included RV591)
CN591
CN503
+5V
+5.6V
DOWN
UP
DATA
GG
IC591
MOTOR DRIVE
【VOLUME BOARD】
B+
IC508 SN74HC04 INVERTER
C555 0.1
FL CLK
IC508
FL501
FL DISPLAY
IC505 SM755703
IC505 FL DRIVE
IC506 SM755703
IC506 FL DRIVE
C552 0.1 F
C557 10000p
C556 10000p
C553 0.1 F
(See page 11)
(See page 11)
TO AUDIO BOARD (CN204)
TO AUDIO BOARD (CN205)
①
②
CN401
CN403
CN402
CN404
CN405
CN502
CN501
SW OFF
HP R
HP AG
HP L
MIC AG
MIC
-7.5V
+5.6V BU
+5.6V
VF
+35V
FL LATCH
FL DATA
FL CLK
KEY1
KEY0
LED LATCH
LED DATA
LED CLK
VOL DOWN
VOL UP
VOL DATA
R581 1k
R582 1k
R583 1k
R584 1k
R585 1k
R586 1k
R587 1k
R588 10k
CL
D551 DCA010
C551 100 10V
VF1
VF2
【CONNECTOR BOARD】
R551 3.3k
R552 470
R553 680
R554 1k
R555 1.5k
S551
S552
S553
S554
S555
SYSTEM POWER
FUNCTION >
FUNCTION <
WAKE UP
DISPLAY
R561 3.3k
R562 470
R563 680
R564 1k
R565 1.5k
R566 2.2k
S561
S562
S563
S564
S565
S567
DIRECT
EQ
S-SUR
DBFB
PRESET ▷
PRESET ◁
IC507 M66311FP
DATA
LATCH
CLK
C554 0.1
IC507
LED DRIVE
R571 680
R572 680
R573 680
R574 680
R575 680
R576 680
R577 330
D571 SEL2210S-TH10
D572 SEL2210S-TH10
D573 SEL2210S-TH10
D574 SEL2210S-TH10
D575 SEL2210S-TH10
D576 SEL2210S-TH10
ON/STANDBY
WAKE UP
DIRECT
EQ
SURROUND
DBFB
D550
PHONO
TUNER
CD
DAT
TAPE
VIDEO
D550 SEL8867B
+5V
GG
+5.6V
【PANEL BOARD】


10
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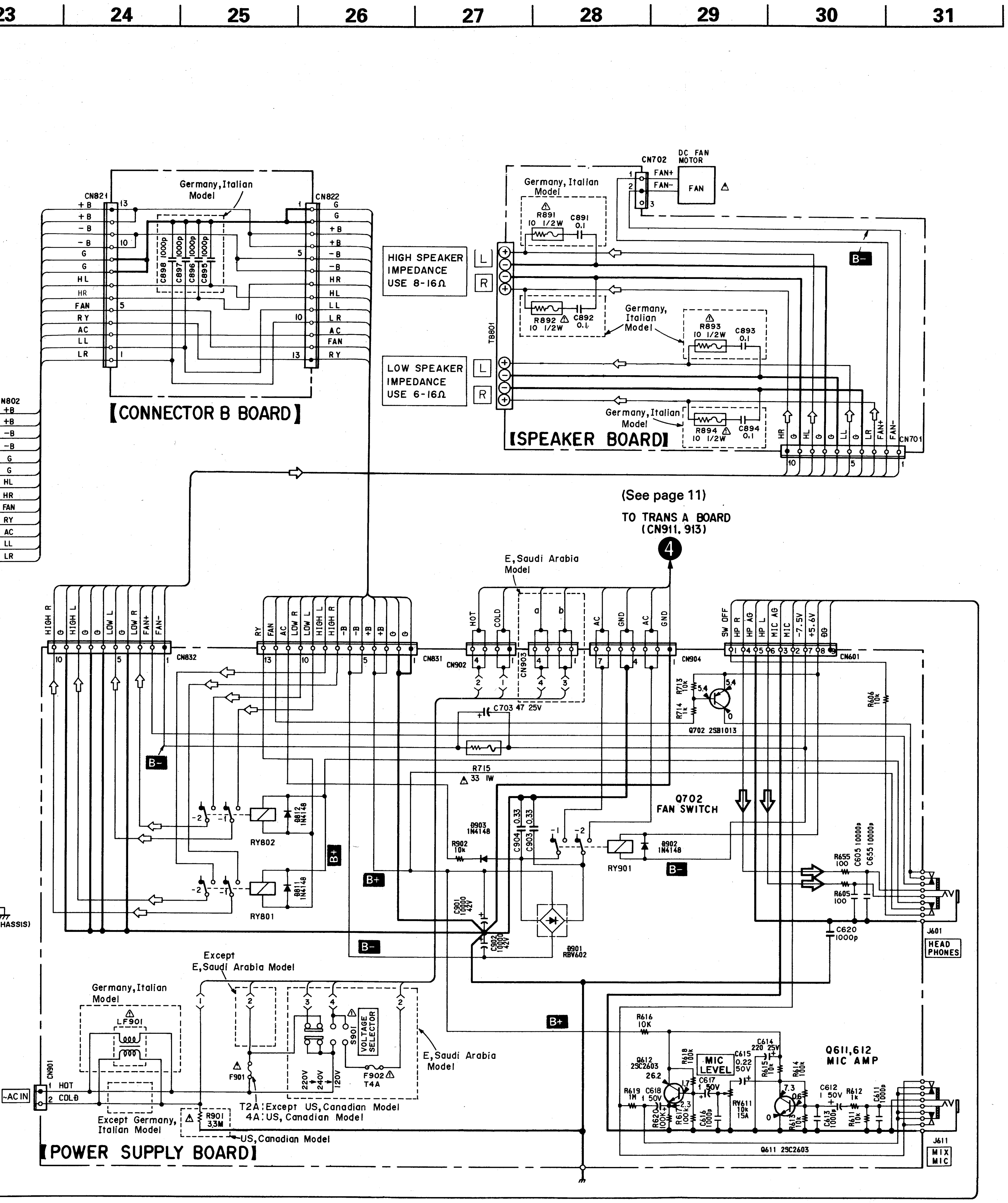
18
19
20
21
22
23
24
25
26
FL501
FL DISPLAY
IC505 SN755703
IC505 FL DRIVE
IC506 SN755703
IC506 FL DRIVE
C552 0.1 F
C557 10000p
C556 10000p
C553 0.1 F
B+
B-
R571 680
R572 680
R573 680
R574 680
R575 680
R576 680
R577 330
D550
ON/STANDBY
WAKE UP
DIRECT
EQ
SURROUND
DBFB
PHONO
TUNER
CD
DAT
TAPE
VIDEO
D550 SEL8867B
IC507
LED DRIVE
【PANEL BOARD】
【CONNECTOR A BOARD】
AG
HL
HR
LL
LR
CN812
CN811
3 TO AUDIO BOARD (CN202)
(See page 13)
LOW R
LOW L
HIGH R
HIGH L
AG
CN801
POWER AMP
IC801
IC801 LM3875-1
R805 0.22 2W
Except AEP Model
AEP Model
Q801 2SC1841
IC821
IC821 LM3875-2
Q801, 821
OVER LOAD DET
Q821 2SC1841
IC851
IC851 LM3875-1
Q851 2SC1841
IC871
IC871 LM3875-2
Q851, 871
OVER LOAD DET
Q871 2SC1841
IC702 LM393 (1/2)
IC702
LM393 (2/2)
LM350Z
IC703
Except Us.Canadian Model
Us.Canadian Model
THERMAL DETECT
COMPARATOR
Q701
PROTECT SW
Q701 2SA1175
IC701
IC701 μPC1237HA
TEMP
RY
AC
C832 10000p
(CHASSIS)
Germany, Italian Model
PROTECTOR
CN802
+B
-B
G
HL
HR
FAN
RY
AC
LL
LR
【POWER AMP BOARD】
CN821
CN822
Germany, Italian Model
C898 1000p
C897 1000p
C896 1000p
C895 1000p
【CONNECTOR B BOARD】
HIGH IMPED USE
LOW IMPED USE
CN832
RY802
RY801
D812 1N4148
D811 1N4148
Except E, Saudi Arabia Model
Germany, Italian Model
LF901
F901
S901 VOLTAGE SELECTOR
220V
240V
120V
F902 T4A
CN901
AC IN
1 HOT
2 COLD
T2A: Except US, Canadian Model
4A: US, Canadian Model
Except Germany, Italian Model
R901 3.3M
US, Canadian Model
【POWER SUPPLY BOARD】



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【CONNECTOR B BOARD】
Germany, Italian Model
CN821
CN822
【SPEAKER BOARD】
HIGH SPEAKER IMPEDANCE USE 8-16Ω
LOW SPEAKER IMPEDANCE USE 6-16Ω
CN702
DC FAN MOTOR
FAN
CN701
R891 10 1/2W
R892 10 1/2W
R893 10 1/2W
R894 10 1/2W
(See page 11)
TO TRANS A BOARD (CN911, 913)
E, Saudi Arabia Model
CN832
CN831
CN902
CN903
CN904
CN601
Q702 2SB1013
R715 33 1W
Q702 FAN SWITCH
RY802
RY801
RY901
D901 RBV602
J601 HEAD PHONES
Q611,612 MIC AMP
MIC LEVEL
J611 MIX MIC
Q611 2SC2603
Q612 2SC2603
Except E, Saudi Arabia Model
Germany, Italian Model
LF901
S901 VOLTAGE SELECTOR
F901
F902 T4A
T2A: Except US, Canadian Model
4A: US, Canadian Model
Except Germany, Italian Model
R901 3.3M
US, Canadian Model
CN901
AC IN
1 HOT
2 COLD
【POWER SUPPLY BOARD】
CHASSIS

Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, 1/4W or less unless otherwise noted.
- ▭ : nonflammable resistor
- ▭ : Fuse resistor

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- B+ : B + Line.
- B– : B – Line.
- Voltage are dc with respect to ground under no -signal conditions.
- no mark : CD
- Voltages are taken with a VOM (input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path
  ⇨ : TUNER

3-8. PIN FUNCTIONS OF IC501 (μPD 78134-D29-3B9)

According to keying in or remote control signal, it sets the Graphic equalizer electronic volume (IC201), DBFB, surround etc. and switches the LED and FL tube display and functions in the deck.

Pin No.	Pin name	I/O	Description
1	CLR	I	Timer pulse input
2	+5V	I	Not in use with the equipment (+5V)
3	DATA	O	Serial data output to the FL tube driver (IC505, 506)
4	CLK	O	Data transfer clock output to the FL tube driver (IC505, 506)
5	S0	I	Input port for model selection. Connected to GND with the equipment.
6	S1	I	Input port for model selection. Connected to +5V with the equipment.
7-12	–	I	Not in use with the equipment (+5V)
13	POT00	O	Timer pulse output (about 400μSec)
14	CLK	O	Data transfer clock output to the LED driver (IC507)
15	DATA	O	Serial data output to LED driver (IC507)
16	LATCH	O	Data latch output to the LED driver (IC507)
17-18	PWM 0, PWM 1	O	Not in use with the equipment (open)
19	AVss	–	Analog system power terminal (GND)
20	AVref	I	Analog port reference voltage input (+5V)
21-22	KEY 0, 1	I	Key input (Analog)*1
23-24	SPE 0, 1	I	Spectrum analysis data input (analog)
25	VOL	I	Volume position data input (analog)
26	DBFB	I	DBFB data input
27-28	–	I	Not in use with the equipment (GND)
29	RESET	I	System reset input. "L" : reset
30	VDD	–	Power terminal (+5V)
31-32	X2, X1	–	Crystal connection terminal for system clock oscillation
33	VSS	–	Power terminal (GND)
34	A	O	Spectrum analysis data input switch A
35	B	O	Spectrum analysis data input switch B
36	INH	O	Spectrum analysis data input switch inhibit
37	A	O	DBFB output switch A
38	B	O	DBFB output switch B *2
39	INH	O	DBFB output switch inhibit
40-41	–		Not in use with the equipment (open)
42	SCL	O	Clock output to EEP-ROM (IC502)
43	SDA	I/O	Data input/output (user preset memory data, etc.) with EEP-ROM (IC502)
44	–	O	Not in use with the equipment (open)
45	AU BUS IN	I	Audio bus input
46	AU BUS OUT	O	Audio bus output (tuner power ON/OFF and instruction to the function switch microcomputer in the deck)
47	–	O	Not in use with the equipment (open)
48	VOL DOWN	O	DOWN signal output of the volume motor (RV591)
49	VOL UP	O	UP signal output of the volume motor (RV591)
50	TC FUNC	I	Request of audio bus (FUNCTION data) from the function switch microcomputer in the deck (TC-H3600)
51	RESET	O	Reset output to the Graphic equalizer electronic volume (IC201) "L" : reset
52	LATCH	O	Data latch output to the Graphic equalizer electronic volume (IC201)
53	CLK	O	Data transfer clock output to the Graphic equalizer electronic volume (IC201)
54	DATA	O	Serial data output to the Graphic equalizer electronic volume (IC201)
55	MUTE	O	Mute reverse output
56	MUTE	O	Mute output
57	POWER ON/OFF	O	Power (IC901) output control. "L" : Power ON
58-62	–	O	Not in use with the equipment (open)
63	DBFB	O	DBFB ON/OFF (IC305) controller output. "H" : ON, "L" : OFF
64	SUR	O	Surround ON/OFF (IC302 1/2) controller output. "H" : surround ON
65	KARAOKE	O	Not in use with the equipment (open)
66	ASTB/CLO	O	Not in use with the equipment (open)
67	VSS	–	Power terminal (GND)
68	EA	I	Not in use with the equipment (open)
69-76	–	O	Not in use with the equipment (open)
77	VDD	–	Power terminal (+5V)
78	–	O	Not in use with the equipment (open)
79	LATCH	O	Data latch output to the FL tube driver (IC505, 506)
80	–	O	Not in use with the equipment (open)

***1 Key input (analog port)**

Input port \ Voltage (V)	0	0.63	1.3	2.0	2.6	3.2
Pin ㉑ KEY 0	POWER S551	FUNCTION AUDIO S552	FUNCTION VIDEO S553	WAKE UP S554	DISPLAY S555	—
Pin ㉒ KEY 1	DIRECT S561	EQ S562	SURROUND S563	DBFB S564	PRESET UP ▷ S565	PRESET DOWN ◁ S567

***2 DBFB level control**

Input port \ Level	OFF	1	2	3	4
Pin ㊲ A	–	L	H	L	H
Pin ㊳ B	–	L	L	H	H
Pin ㊴ INH	H	L	L	L	L

	I/O	Description
	O	Data transfer clock output to the Graphic equalizer electronic volume (IC201)
	O	Serial data output to the Graphic equalizer electronic volume (IC201)
	O	Mute reverse output
	O	Mute output
F	O	Power (IC901) output control. "L" : Power ON
	O	Not in use with the equipment (open)
	O	DBFB ON/OFF (IC305) controller output. "H" : ON, "L" : OFF
	O	Surround ON/OFF (IC302 1/2) controller output. "H" : surround ON
	O	Not in use with the equipment (open)
	O	Not in use with the equipment (open)
	–	Power terminal (GND)
	I	Not in use with the equipment (open)
	O	Not in use with the equipment (open)
	–	Power terminal (+5V)
	O	Not in use with the equipment (open)
	O	Data latch output to the FL tube driver (IC505, 506)
	O	Not in use with the equipment (open)

0.63	1.3	2.0	2.6	3.2
FUNCTION AUDIO S552	FUNCTION VIDEO S553	WAKE UP S554	DISPLAY S555	—
EQ S562	SURROUND S563	DBFB S564	PRESET UP ▷ S565	PRESET DOWN ◁ S567

2	3	4
H	L	H
L	H	H
L	L	L

SECTION 4

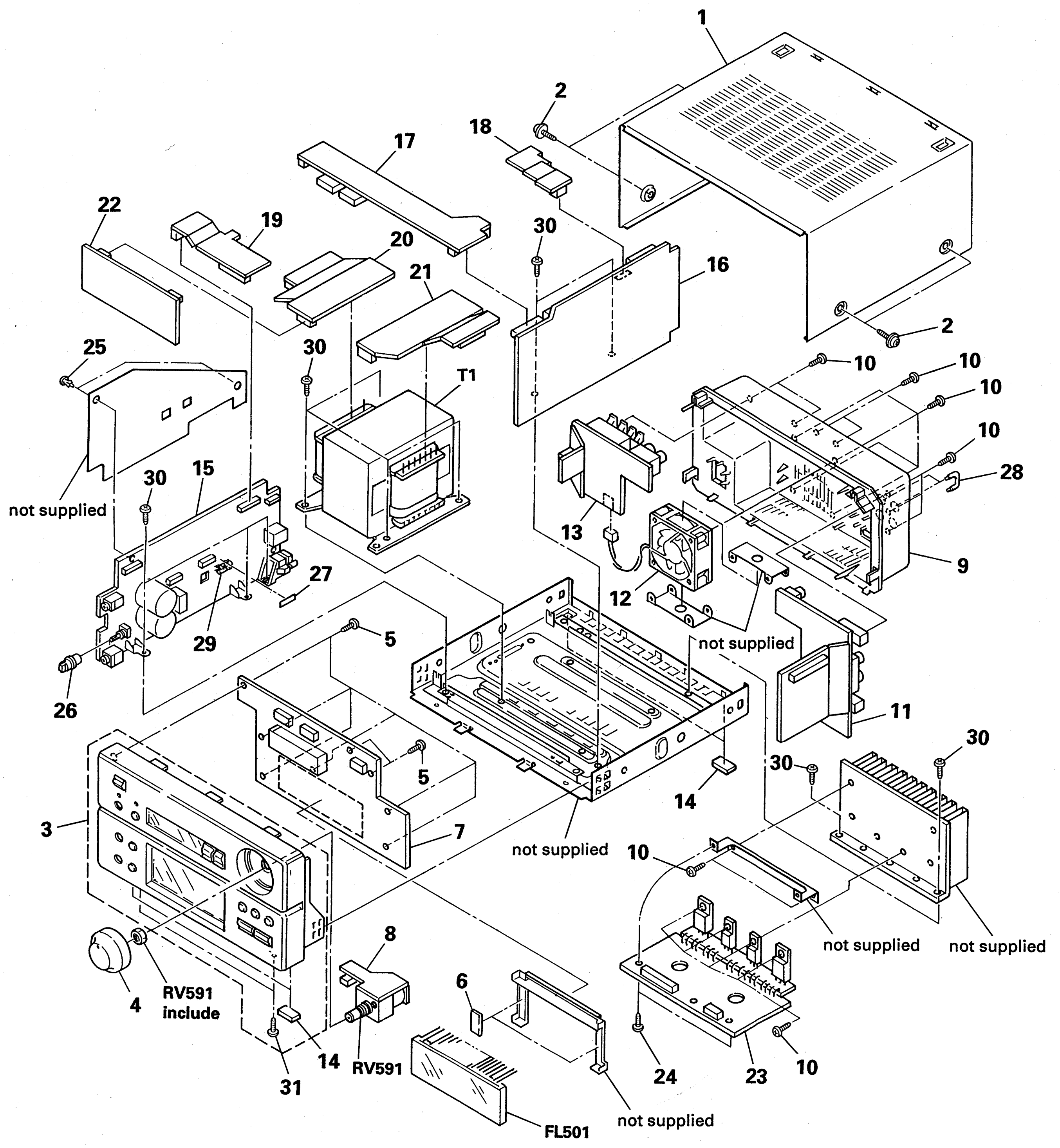
EXPLODED VIEW

NOTE:

- –XX, –X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB,BALANCE(WHITE)...(RED)
  ↑ ↑
  Parts color Cabinet's color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- CND : Canadian model
  G : Germany model
  IT : Italian model
  EA : Saudi Arabia model
  AUS : Australian model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.



Ref. No.		Part No.	Description
1	*	4-944-522-01	CASE (K211522)
2		3-363-099-01	SCREW (CASE +3X8 TP2)
3		X-4941-543-1	PANEL (AE/NA) ASSY, FRON (US, C
		X-4941-542-3	PANEL ASSY, FRONT (E, EA,
4		X-4941-532-1	KNOB (VOLUME) ASSY
5		4-928-635-01	SCREW, +BV (2.6X8) TAPPI
6	*	4-932-810-11	CUSHION (FL)
7	*	A-4341-635-A	PANEL BOARD, COMPLETE (US, CND, AE
	*	A-4345-406-A	PANEL BOARD, COMPLETE (G
8	*	1-638-538-11	VOLUME BOARD
9		4-943-336-51	PANEL, BACK (US, CND, AEP,
		4-943-336-31	PANEL, BACK (E, EA)
10		7-685-647-79	SCREW +BVTP 3X10 TYPE
11	*	1-638-545-11	JACK BOARD
12	⚠	1-541-860-11	MOTOR, DC FAN
13	*	1-638-546-11	SPEAKER BOARD
14		4-930-336-01	FOOT (FELT)
15	*	A-4341-627-A	POWER SUPPLY BOARD, COMPI
	*	A-4341-632-A	POWER SUPPLY BOARD, COMPI
	*	A-4341-637-A	POWER SUPPLY BOARD, COMPI
	*	A-4341-641-A	POWER SUPPLY BOARD, COMPI
	*	A-4341-700-A	POWER SUPPLY BOARD, COMPI
16	*	A-4341-626-A	AUDIO BOARD, COMPLETE (AI
	*	A-4341-631-A	AUDIO BOARD, COMPLETE (G,
	*	A-4341-636-A	AUDIO BOARD, COMPLETE (E,
	*	A-4341-640-A	AUDIO BOARD, COMPLETE (U
17	*	1-638-539-11	CONNECTOR BOARD
18	*	1-638-547-11	CONNECTOR (A) BOARD
19	*	1-638-548-11	CONNECTOR (B) BOARD
20	*	1-638-542-11	TRANSFORMER (A) BOARD
21	*	1-638-543-11	TRANSFORMER (B) BOARD
22	*	1-638-540-11	TRANSFORMER (C) BOARD
23	*	A-4345-025-A	POWER AMP BOARD, COMPLETI
	*	A-4341-633-A	POWER AMP BOARD, COMPLETI
	*	A-4341-638-A	POWER AMP BOARD, COMPLETI
	*	A-4341-642-A	POWER AMP BOARD, COMPLETI
24		7-685-645-79	SCREW +BVTP 3X6 TYPE
25		4-812-134-11	RIVET NYLON, 3.5
26		4-932-882-11	KNOB (HP. VOL)
27		3-701-946-26	LABEL (4A 125V), FUSE (U
28		1-535-706-11	PLUG, JUMPER (E, EA)
29	*	1-533-213-31	HOLDER, FUSE
30		7-682-547-04	SCREW +BVTT 3X6 (S)
31		7-682-547-09	SCREW +BVTT 3X6 (S)

CTION 4

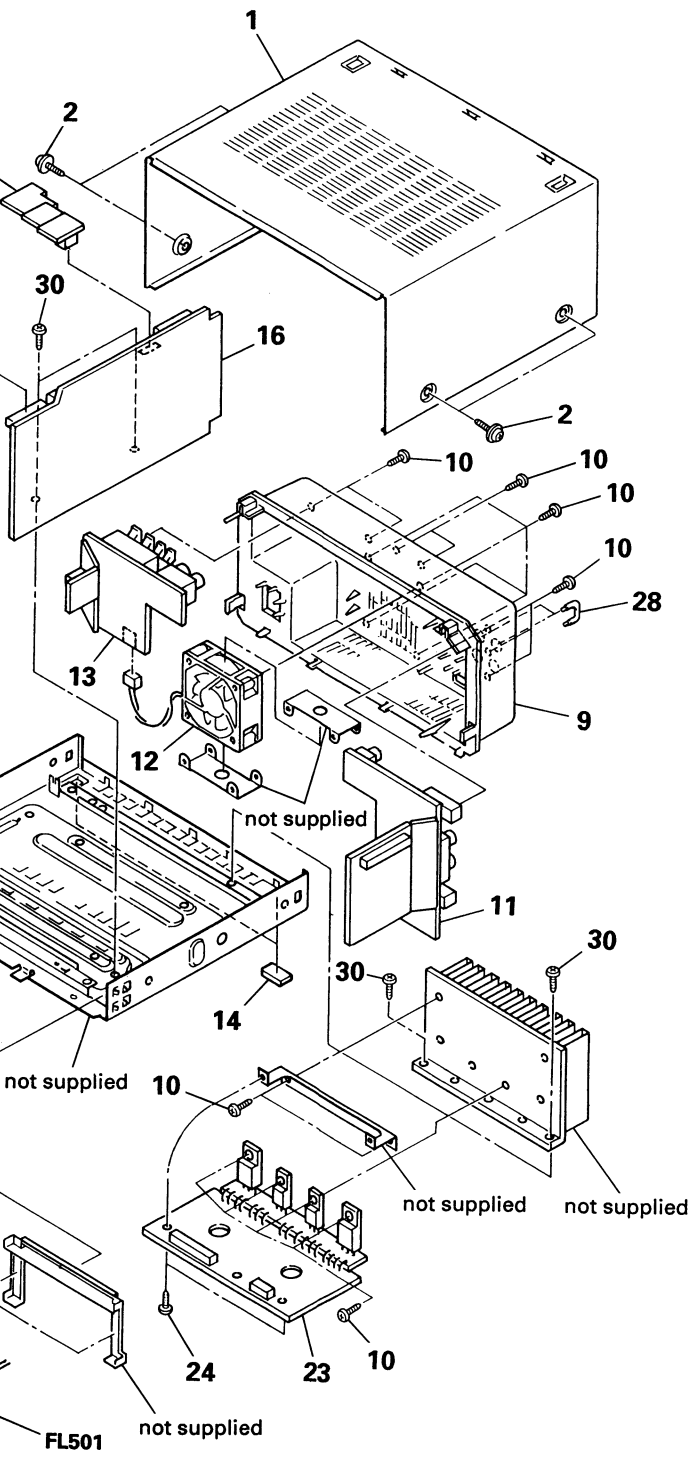
ODED VIEW

' are not stocked since they are
for routine service. Some de-
ticipated when ordering these

parts with no reference num-
led views are not supplied.
model
model
del
bia model
model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.



Ref. No.	Part No.	Description	Remarks
1	* 4-944-522-01	CASE (K211522)	
2	3-363-099-01	SCREW (CASE +3X8 TP2)	
3	X-4941-543-1	PANEL (AE/NA) ASSY, FRONT (US, CND, AEP, UK, G, IT)	
	X-4941-542-3	PANEL ASSY, FRONT (E, EA, AUS)	
4	X-4941-532-1	KNOB (VOLUME) ASSY	
5	4-928-635-01	SCREW, +BV (2.6X8) TAPPING	
6	* 4-932-810-11	CUSHION (FL)	
7	* A-4341-635-A	PANEL BOARD, COMPLETE (US, CND, AEP, UK, E, EA, AUS)	
	* A-4345-406-A	PANEL BOARD, COMPLETE (G, IT)	
8	* 1-638-538-11	VOLUME BOARD	
9	4-943-336-51	PANEL, BACK (US, CND, AEP, UK, G, IT, AUS)	
	4-943-336-31	PANEL, BACK (E, EA)	
10	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
11	* 1-638-545-11	JACK BOARD	
12	⚠ 1-541-860-11	MOTOR, DC FAN	
13	* 1-638-546-11	SPEAKER BOARD	
14	4-930-336-01	FOOT (FELT)	
15	* A-4341-627-A	POWER SUPPLY BOARD, COMPLETE (AEP, UK, AUS)	
	* A-4341-632-A	POWER SUPPLY BOARD, COMPLETE (G, IT)	
	* A-4341-637-A	POWER SUPPLY BOARD, COMPLETE (E)	
	* A-4341-641-A	POWER SUPPLY BOARD, COMPLETE (US, CND)	
	* A-4341-700-A	POWER SUPPLY BOARD, COMPLETE (EA)	
16	* A-4341-626-A	AUDIO BOARD, COMPLETE (AEP, UK, AUS)	
	* A-4341-631-A	AUDIO BOARD, COMPLETE (G, IT)	
	* A-4341-636-A	AUDIO BOARD, COMPLETE (E, EA)	
	* A-4341-640-A	AUDIO BOARD, COMPLETE (US, CND)	
17	* 1-638-539-11	CONNECTOR BOARD	
18	* 1-638-547-11	CONNECTOR (A) BOARD	
19	* 1-638-548-11	CONNECTOR (B) BOARD	
20	* 1-638-542-11	TRANSFORMER (A) BOARD	
21	* 1-638-543-11	TRANSFORMER (B) BOARD	
22	* 1-638-540-11	TRANSFORMER (C) BOARD	
23	* A-4345-025-A	POWER AMP BOARD, COMPLETE (AEP)	
	* A-4341-633-A	POWER AMP BOARD, COMPLETE (G, IT)	
	* A-4341-638-A	POWER AMP BOARD, COMPLETE (E, EA)	
	* A-4341-642-A	POWER AMP BOARD, COMPLETE (US, CND)	
24	7-685-645-79	SCREW +BVTP 3X6 TYPE2 IT-3	
25	4-812-134-11	RIVET NYLON, 3.5	
26	4-932-882-11	KNOB (HP. VOL)	
27	3-701-946-26	LABEL (4A 125V), FUSE (US, CND)	
28	1-535-706-11	PLUG, JUMPER (E, EA)	
29	* 1-533-213-31	HOLDER, FUSE	
30	7-682-547-04	SCREW +BVTT 3X6 (S)	
31	7-682-547-09	SCREW +BVTT 3X6 (S)	

SECTION 5

ELECTRICAL PARTS LIST

AUDIO PANEL

VOLUME CONNECTOR

TRANSFORMER(C)

NOTE:

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- –XX, –X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE : Metal Oxide-film resistor
  F : nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : μ, for example :
  uA...: μA..., uPA...: μPA...,
  uPB...: μPB..., uPC...: μPC...,
  uPD...: μPD...
- CAPACITORS
  uF :μF
- COILS
  uH : μH

Ref. No.	Part No.	Description			Remarks
	* A-4341-626-A	AUDIO BOARD, COMPLETE (AEP, UK, AUS)			
	* A-4341-631-A	AUDIO BOARD, COMPLETE (G, IT)			
	* A-4341-636-A	AUDIO BOARD, COMPLETE (E, EA)			
	* A-4341-640-A	AUDIO BOARD, COMPLETE (US, CND)			
		*********************			
	* A-4341-635-A	PANEL BOARD, COMPLETE (US, CND, AEP, UK, E, EA, AUS)			
	* A-4345-406-A	PANEL BOARD, COMPLETE (G, IT)			
		*********************			
	* 1-638-538-11	VOLUME BOARD			
		************			
	* 1-638-539-11	CONNECTOR BOARD			
		***************			
	* 1-638-540-11	TRANSFORMER (C) BOARD			
		*********************			
	* 4-932-810-11	CUSHION (FL)			
		〈 CAPACITOR 〉			
C201	1-124-907-11	ELECT	10uF	20%	50V
C202	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C203	1-124-907-11	ELECT	10uF	20%	50V
C204	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C205	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C206	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C207	1-164-346-11	CERAMIC CHIP	1uF		16V
C210	1-124-443-00	ELECT	100uF	20%	10V
C211	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C212	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C213	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C214	1-164-343-11	CERAMIC CHIP	0.056uF	10%	25V
C215	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C216	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C217	1-163-024-00	CERAMIC CHIP	0.018uF	10%	50V
C218	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C219	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C220	1-163-016-00	CERAMIC CHIP	0.0039uF	10%	50V
C221	1-163-014-00	CERAMIC CHIP	0.0027uF	10%	50V
C222	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C223	1-163-010-11	CERAMIC CHIP	0.0012uF	10%	50V
C224	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C251	1-124-907-11	ELECT	10uF	20%	50V
C252	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C253	1-124-907-11	ELECT	10uF	20%	50V
C254	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C255	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C256	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C257	1-164-346-11	CERAMIC CHIP	1uF		16V
C261	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C262	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C263	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C264	1-164-343-11	CERAMIC CHIP	0.056uF	10%	25V
C265	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C266	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C267	1-163-024-00	CERAMIC CHIP	0.018uF	10%	50V
C268	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C269	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C270	1-163-016-00	CERAMIC CHIP	0.0039uF	10%	50V
C271	1-163-014-00	CERAMIC CHIP	0.0027uF	10%	50V
C272	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C273	1-163-010-11	CERAMIC CHIP	0.0012uF	10%	50V
C274	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C291	1-124-443-00	ELECT	100uF	20%	10V
C292	1-124-443-00	ELECT	100uF	20%	10V
C293	1-124-443-00	ELECT	100uF	20%	10V
C294	1-124-443-00	ELECT	100uF	20%	10V
C295	1-124-443-00	ELECT	100uF	20%	10V
C301	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C302	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C311	1-164-346-11	CERAMIC CHIP	1uF		16V
C312	1-164-346-11	CERAMIC CHIP	1uF		16V
C313	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C321	1-136-165-00	FILM	0.1uF	5%	50V
C322	1-136-165-00	FILM	0.1uF	5%	50V
C323	1-124-903-11	ELECT	1uF	20%	50V
C325	1-124-907-11	ELECT	10uF	20%	50V
C326	1-124-907-11	ELECT	10uF	20%	50V
C327	1-124-443-00	ELECT	100uF	20%	10V
C341	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C342	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C343	1-124-443-00	ELECT	100uF	20%	10V
C351	1-163-117-00	CERAMIC CHIP	100PF	5%	50V

Ref. No.	Part No.	Description			Remarks
C352	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C371	1-136-165-00	FILM	0.1uF	5%	50V
C372	1-136-165-00	FILM	0.1uF	5%	50V
C373	1-124-903-11	ELECT	1uF	20%	50V
C375	1-124-907-11	ELECT	10uF	20%	50V
C376	1-124-907-11	ELECT	10uF	20%	50V
C501	1-124-443-00	ELECT	100uF	20%	10V
C502	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C503	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C511	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C512	1-124-443-00	ELECT	100uF	20%	10V
C513	1-124-443-00	ELECT	100uF	20%	10V
C521	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C522	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C523	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C524	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C525	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C526	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C527	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C528	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C542	1-124-477-11	ELECT	47uF	20%	25V
C551	1-124-443-00	ELECT	100uF	20%	10V
C552	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C553	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C554	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C555	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C556	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C557	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C591	1-124-443-00	ELECT	100uF	20%	10V
C592	1-124-907-11	ELECT	10uF	20%	50V
C593	1-124-907-11	ELECT	10uF	20%	50V
C601	1-124-907-11	ELECT	10uF	20%	50V
C602	1-124-907-11	ELECT	10uF	20%	50V
C603	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C604	1-124-472-11	ELECT	470uF	20%	10V
C605	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C651	1-124-907-11	ELECT	10uF	20%	50V
C652	1-124-907-11	ELECT	10uF	20%	50V
C653	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C654	1-124-472-11	ELECT	470uF	20%	10V
C655	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C731	1-136-165-00	FILM	0.1uF	5%	50V
C732	1-136-159-00	FILM	0.033uF	5%	50V
C733	1-164-695-11	CERAMIC CHIP	2200pF	5%	50V (G, IT)
C735	1-164-232-11	CERAMIC CHIP	0.01uF	10%	50V (G, IT)
C783	1-164-695-11	CERAMIC CHIP	2200pF	5%	50V (G, IT)
C785	1-164-232-11	CERAMIC CHIP	0.01uF	10%	50V (G, IT)
C741	1-136-165-00	FILM	0.1uF	5%	50V
C742	1-136-165-00	FILM	0.1uF	5%	50V
C743	1-136-153-00	FILM	0.01uF	5%	50V
C744	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C745	1-124-907-11	ELECT	10uF	20%	50V

Ref. No.	Part No.	Description			Remarks
C781	1-136-165-00	FILM	0.1uF	5%	50V
C782	1-136-159-00	FILM	0.033uF	5%	50V
C791	1-136-165-00	FILM	0.1uF	5%	50V
C792	1-136-165-00	FILM	0.1uF	5%	50V
C793	1-136-153-00	FILM	0.01uF	5%	50V
C794	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C795	1-124-907-11	ELECT	10uF	20%	50V
C911	1-124-563-11	ELECT	2200uF	20%	25V
C912	1-124-563-11	ELECT	2200uF	20%	25V
C913	1-136-165-00	FILM	0.1uF	5%	50V
C914	1-136-165-00	FILM	0.1uF	5%	50V
C920	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C921	1-164-346-11	CERAMIC CHIP	1uF		16V
C922	1-124-443-00	ELECT	100uF	20%	10V
C923	1-164-346-11	CERAMIC CHIP	1uF		16V
C924	1-124-443-00	ELECT	100uF	20%	10V
C925	1-164-346-11	CERAMIC CHIP	1uF		16V
C926	1-124-443-00	ELECT	100uF	20%	10V
C927	1-164-346-11	CERAMIC CHIP	1uF		16V
C928	1-124-443-00	ELECT	100uF	20%	10V
C929	1-164-346-11	CERAMIC CHIP	1uF		16V
C930	1-124-907-11	ELECT	10uF	20%	50V
C931	1-126-104-11	ELECT	470uF	20%	35V
C932	1-126-105-11	ELECT	1000uF	20%	35V
C933	1-124-477-11	ELECT	47uF	20%	25V
C934	1-124-477-11	ELECT	47uF	20%	25V
C941	1-124-122-11	ELECT	100uF	20%	50V
C942	1-124-907-11	ELECT	10uF	20%	50V
C943	1-124-907-11	ELECT	10uF	20%	50V
C951	1-124-122-11	ELECT	100uF	20%	50V
C952	1-124-907-11	ELECT	10uF	20%	50V
C953	1-124-907-11	ELECT	10uF	20%	50V
C954	1-163-035-00	CERAMIC CHIP	0.047uF		50V
		〈 CONNECTOR 〉			
CN201	* 1-566-154-11	CONNECTOR, BOARD TO BOARD 20P			
CN202	* 1-569-500-11	PIN, CONNECTOR 5P			
CN203	* 1-569-505-11	PIN, CONNECTOR 10P			
CN204	* 1-569-396-11	PIN, CONNECTOR 4P			
CN205	* 1-580-051-11	SOCKET, CONNECTOR 20P			
CN401	1-569-397-11	SOCKET, CONNECTOR 4P			
CN402	1-569-495-11	SOCKET, CONNECTOR 9P			
CN403	* 1-580-050-11	PIN, CONNECTOR 20P			
CN404	1-568-321-11	SOCKET, CONNECTOR 10P			
CN405	1-568-321-11	SOCKET, CONNECTOR 10P			
CN501	* 1-568-322-11	PLUG, CONNECTOR 10P			
CN502	* 1-568-322-11	PLUG, CONNECTOR 10P			
CN503	* 1-568-318-11	PLUG, CONNECTOR 6P			
CN591	1-568-317-11	SOCKET, CONNECTOR 6P			
CN931	1-569-493-11	SOCKET, CONNECTOR 7P			
CN932	1-569-493-11	SOCKET, CONNECTOR 7P			

When indicating parts by reference number, please include the board name.

AUDIO PANEL VOLUME CONNECTOR TRANSFORMER(C)

(DIODE)

Ref. No.	Part No.	Description	Remarks
D291	8-719-990-36	DIODE DCA010	
D294	8-719-990-36	DIODE DCA010	
D311	8-719-990-36	DIODE DCA010	
D312	8-719-990-36	DIODE DCA010	
D331	8-719-990-36	DIODE DCA010	
D341	8-719-990-36	DIODE DCA010	
D342	8-719-990-36	DIODE DCA010	
D501	8-719-990-36	DIODE DCA010	
D502	8-719-990-36	DIODE DCA010	
D503	8-719-990-36	DIODE DCA010	
D504	8-719-990-36	DIODE DCA010	
D505	8-719-990-36	DIODE DCA010	
D550	8-719-313-71	DIODE SEL8867B	
D551	8-719-104-34	DIODE 1S2836	
D571	8-719-301-37	DIODE SEL2210S	
D572	8-719-301-37	DIODE SEL2210S	
D573	8-719-301-37	DIODE SEL2210S	
D574	8-719-301-37	DIODE SEL2210S	
D575	8-719-301-37	DIODE SEL2210S	
D576	8-719-301-37	DIODE SEL2210S	
D591	8-719-104-34	DIODE 1S2836	
D911	8-719-210-33	DIODE EC10DS2	
D912	8-719-210-33	DIODE EC10DS2	
D913	8-719-210-33	DIODE EC10DS2	
D914	8-719-210-33	DIODE EC10DS2	
D931	8-719-210-33	DIODE EC10DS2	
D932	8-719-210-33	DIODE EC10DS2	
D933	8-719-106-79	DIODE RD13M-B1	
D941	8-719-210-33	DIODE EC10DS2	
D942	8-719-118-15	DIODE RD36M-B	
D951	8-719-210-33	DIODE EC10DS2	
D952	8-719-118-09	DIODE RD30M-B	
D953	8-719-105-82	DIODE RD5.1M-B2	

(INDICATOR)

Ref. No.	Part No.	Description	Remarks
FL501	1-519-649-11	INDICATOR TUBE, FLUORESCENT	

(IC)

Ref. No.	Part No.	Description	Remarks
IC201	8-759-636-57	IC CXA1492Q	
IC301	8-759-636-55	IC M5218AFP	
IC303	8-759-636-55	IC M5218AFP	
IC304	8-759-009-06	IC MC14052BF	
IC305	8-759-300-71	IC HD14053BFP	
IC501	8-759-153-02	IC uPD78134-D29-3B9	
IC502	8-759-500-31	IC X24C01P	
IC503	8-759-009-06	IC MC14052BF	
IC504	8-759-991-11	IC XR1091DCP	
IC505	8-759-512-44	IC SN755703	
IC506	8-759-512-44	IC SN755703	
IC507	8-759-636-56	IC M66311FP	
IC508	8-759-925-74	IC SN74HC04NS	
IC591	8-759-820-62	IC LB1639	
IC601	8-759-636-55	IC M5218AFP	
IC731	8-759-636-55	IC M5218AFP	
IC741	8-759-636-55	IC M5218AFP	
IC901	8-759-823-46	IC LA5603	

(CHIP JUMPER)

Ref. No.	Part No.	Description	Remarks
JR2	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR4	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR6	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR7	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR10	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR12	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR204	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR254	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR501	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR504	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR702	1-216-295-00	METAL CHIP 0 5% 1/10W	(Except G, IT)
JR735	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR752	1-216-295-00	METAL CHIP 0 5% 1/10W	(Except G, IT)
JR785	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR911	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR912	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR913	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR915	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR916	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR917	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR918	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR919	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR920	1-216-296-00	METAL CHIP 0 5% 1/8W	
JR922	1-216-296-00	METAL CHIP 0 5% 1/8W	
JR923	1-216-296-00	METAL CHIP 0 5% 1/8W	

(TRANSISTOR)

Ref. No.	Part No.	Description	Remarks
Q292	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q293	8-729-216-22	TRANSISTOR 2SA1162-G	
Q311	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q312	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q321	8-729-107-43	TRANSISTOR 2SC3624-L18	
Q322	8-729-805-67	TRANSISTOR 2SA1342	
Q323	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q341	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q342	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q371	8-729-107-43	TRANSISTOR 2SC3624-L18	
Q373	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q501	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q502	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q921	8-729-805-43	TRANSISTOR 2SC3396	
Q931	8-729-209-15	TRANSISTOR 2SD2012	
Q932	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q941	8-729-808-01	TRANSISTOR 2SD1622-S	

When indicating parts by reference number, please include the board name.

AUDIO PANEL VOLUME CONNECTOR TRANSFORMER(C)

Ref. No.	Part No.	Description				Remarks
Q951	8-729-820-86	TRANSISTOR	2SB1121-S			
		(RESISTOR)				
R201	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R202	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R203	1-216-085-00	METAL CHIP	33K	5%	1/10W	
R206	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R207	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R208	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R211	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R212	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R213	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R214	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R215	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R216	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R217	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R251	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R252	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R253	1-216-085-00	METAL CHIP	33K	5%	1/10W	
R256	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R257	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R258	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R261	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R262	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R263	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R264	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R265	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R266	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R267	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R291	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R292	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R301	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R302	1-216-077-00	METAL CHIP	15K	5%	1/10W	
R304	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R311	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R312	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R313	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R314	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R315	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R316	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R317	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R318	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R321	1-216-053-00	METAL CHIP	1.5K	5%	1/10W	
R322	1-216-109-00	METAL CHIP	330K	5%	1/10W	
R323	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R324	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R325	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R326	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R327	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R328	1-216-041-00	METAL CHIP	470	5%	1/10W	
R329	1-216-025-00	METAL CHIP	100	5%	1/10W	
R330	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	

Ref. No.	Part No.	Description				Remarks
R331	1-216-025-00	METAL CHIP	100	5%	1/10W	
R332	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R333	1-216-748-11	METAL CHIP	39K	5%	1/10W	
R334	1-216-105-00	METAL CHIP	220K	5%	1/10W	
R341	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R342	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R343	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R344	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R345	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R346	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R347	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R348	1-216-041-00	METAL CHIP	470	5%	1/10W	
R349	1-216-025-00	METAL CHIP	100	5%	1/10W	
R351	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R352	1-216-077-00	METAL CHIP	15K	5%	1/10W	
R354	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R371	1-216-053-00	METAL CHIP	1.5K	5%	1/10W	
R372	1-216-109-00	METAL CHIP	330K	5%	1/10W	
R373	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R374	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R375	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R376	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R377	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R378	1-216-041-00	METAL CHIP	470	5%	1/10W	
R379	1-216-025-00	METAL CHIP	100	5%	1/10W	
R380	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R381	1-216-025-00	METAL CHIP	100	5%	1/10W	
R382	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R383	1-216-748-11	METAL CHIP	39K	5%	1/10W	
R384	1-216-105-00	METAL CHIP	220K	5%	1/10W	
R391	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R398	1-216-041-00	METAL CHIP	470	5%	1/10W	
R399	1-216-025-00	METAL CHIP	100	5%	1/10W	
R501	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R502	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R503	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R504	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R505	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R506	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R507	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R511	1-216-053-00	METAL CHIP	1.5K	5%	1/10W	
R512	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R513	1-216-009-00	METAL CHIP	22	5%	1/10W	
R521	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R522	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R523	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R524	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R525	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R526	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R527	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R528	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R530	1-216-089-00	METAL CHIP	47K	5%	1/10W	

When indicating parts by reference number, please include the board name.

AUDIO PANEL VOLUME CONNECTOR TRANSFORMER(C)

Ref. No.	Part No.	Description	Remarks
R531	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R532	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R533	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R534	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R535	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R536	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R537	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R538	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R539	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R540	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R541	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R542	1-216-041-00	METAL CHIP 470 5% 1/10W	
R551	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R552	1-216-041-00	METAL CHIP 470 5% 1/10W	
R553	1-216-045-00	METAL CHIP 680 5% 1/10W	
R554	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R555	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
R561	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R562	1-216-041-00	METAL CHIP 470 5% 1/10W	
R563	1-216-045-00	METAL CHIP 680 5% 1/10W	
R564	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R565	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
R566	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R571	1-216-045-00	METAL CHIP 680 5% 1/10W	
R572	1-216-045-00	METAL CHIP 680 5% 1/10W	
R573	1-216-045-00	METAL CHIP 680 5% 1/10W	
R574	1-216-045-00	METAL CHIP 680 5% 1/10W	
R575	1-216-045-00	METAL CHIP 680 5% 1/10W	
R576	1-216-045-00	METAL CHIP 680 5% 1/10W	
R577	1-216-037-00	METAL CHIP 330 5% 1/10W	
R581	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R582	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R583	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R584	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R585	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R586	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R587	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R588	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R591	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R592	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R593	1-216-043-00	METAL CHIP 560 5% 1/10W	
R594	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R601	1-216-075-00	METAL CHIP 12K 5% 1/10W	
R602	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R603	1-216-075-00	METAL CHIP 12K 5% 1/10W	
R604	1-216-295-00	METAL CHIP 0 5% 1/10W	
R606	1-216-021-00	METAL CHIP 68 5% 1/10W	
R651	1-216-075-00	METAL CHIP 12K 5% 1/10W	
R652	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R653	1-216-075-00	METAL CHIP 12K 5% 1/10W	
R654	1-216-017-00	METAL CHIP 47 5% 1/10W	
R731	1-216-059-00	METAL CHIP 2.7K 5% 1/10W	

Ref. No.	Part No.	Description	Remarks
R732	1-216-094-00	METAL GLAZE 75K 5% 1/10W	
R733	1-216-049-00	METAL CHIP 1K 5% 1/10W	(G, IT)
R741	1-216-076-00	METAL GLAZE 13K 5% 1/10W	
R742	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R743	1-216-082-00	METAL GLAZE 24K 5% 1/10W	
R744	1-216-121-00	METAL CHIP 1M 5% 1/10W	
R781	1-216-059-00	METAL CHIP 2.7K 5% 1/10W	
R782	1-216-094-00	METAL GLAZE 75K 5% 1/10W	
R783	1-216-049-00	METAL CHIP 1K 5% 1/10W	(G, IT)
R791	1-216-076-00	METAL GLAZE 13K 5% 1/10W	
R792	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R793	1-216-082-00	METAL GLAZE 24K 5% 1/10W	
R794	1-216-121-00	METAL CHIP 1M 5% 1/10W	
R923	1-216-025-00	METAL CHIP 100 5% 1/10W	
R925	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R931	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R932	1-216-025-00	METAL CHIP 100 5% 1/10W	
R933	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R934	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R941	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R951	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R952	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R953	1-216-025-00	METAL CHIP 100 5% 1/10W	

〈 VARIABLE RESISTOR 〉

Ref. No.	Part No.	Description	Remarks
RV591	1-241-418-11	RES, VAR, CARBON 10K (VOLUME)	

〈 SWITCH 〉

Ref. No.	Part No.	Description	Remarks
S551	1-572-198-11	SWITCH, KEY BOARD (SYSTEM POWER)	
S552	1-572-198-11	SWITCH, KEY BOARD (FUNCTION >)	
S553	1-572-198-11	SWITCH, KEY BOARD (FUNCTION <)	
S554	1-572-198-11	SWITCH, KEY BOARD (WAKE UP)	
S555	1-572-198-11	SWITCH, KEY BOARD (DISPLAY)	
S561	1-572-198-11	SWITCH, KEY BOARD (DIRECT)	
S562	1-572-198-11	SWITCH, KEY BOARD (EQ)	
S563	1-572-198-11	SWITCH, KEY BOARD (S-SUR)	
S564	1-572-198-11	SWITCH, KEY BOARD (DBFB)	
S565	1-572-198-11	SWITCH, KEY BOARD (PRESET ▷)	
S567	1-572-198-11	SWITCH, KEY BOARD (PRESET ◁)	

〈 CRYSTAL 〉

Ref. No.	Part No.	Description	Remarks
X501	1-577-364-11	VIBRATOR, CERAMIC (12MHz)	

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When indicating parts by reference number, please include the board name.

POWER SUPPLY | POWER AMP | TRANSFORMER(A) | TRANSFORMER(B) | JACK | SPEAKER | CONNECTOR(A) | CONNECTOR(B)

Ref. No.	Part No.	Description	Remarks
	* A-4341-627-A	POWER SUPPLY BOARD, COMPLETE(AEP, UK, AUS)	
	* A-4341-632-A	POWER SUPPLY BOARD, COMPLETE (G, IT)	
	* A-4341-637-A	POWER SUPPLY BOARD, COMPLETE (E)	
	* A-4341-641-A	POWER SUPPLY BOARD, COMPLETE (US, CND)	
	* A-4341-700-A	POWER SUPPLY BOARD, COMPLETE (EA)	
		****************************	
	* A-4345-025-A	POWER AMP BOARD, COMPLETE (AEP, UK, AUS)	
	* A-4341-633-A	POWER AMP BOARD, COMPLETE (G, IT)	
	* A-4341-638-A	POWER AMP BOARD, COMPLETE (E, EA)	
	* A-4341-642-A	POWER AMP BOARD, COMPLETE (US, CND)	
		*************************	
	* 1-638-542-11	TRANSFORMER (A) BOARD	
		*********************	
	* 1-638-543-11	TRANSFORMER (B) BOARD	
		*********************	
	* 1-638-545-11	JACK BOARD	
		**********	
	* 1-638-546-11	SPEAKER BOARD	
		*************	
	* 1-638-547-11	CONNECTOR (A) BOARD	
		*******************	
	* 1-638-548-11	CONNECTOR (B) BOARD	
		*******************	
	* 1-533-213-31	HOLDER, FUSE	

〈 CAPACITOR 〉

Ref. No.	Part No.	Description				Remarks
C401	1-162-282-31	CERAMIC	100PF	10%	50V	
C402	1-161-379-00	CERAMIC	0.01uF	20%	25V	(AEP, UK, G, IT, AUS)
C451	1-162-282-31	CERAMIC	100PF	10%	50V	
C605	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C611	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C612	1-124-903-11	ELECT	1uF	20%	50V	
C613	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C614	1-124-120-11	ELECT	220uF	20%	25V	
C615	1-124-464-11	ELECT	0.22uF	20%	50V	
C616	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C617	1-124-903-11	ELECT	1uF	20%	50V	
C618	1-124-903-11	ELECT	1uF	20%	50V	
C620	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C655	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C701	1-126-176-11	ELECT	220uF	20%	10V	
C702	1-126-176-11	ELECT	220uF	20%	10V	
C703	1-124-477-11	ELECT	47uF	20%	25V	
C704	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C705	1-161-494-00	CERAMIC	0.022uF		25V	
C706	1-124-927-11	ELECT	4.7uF	20%	100V	
C707	1-124-478-11	ELECT	100uF	20%	25V	
C708	1-124-907-11	ELECT	10uF	20%	50V	
C709	1-164-159-11	CERAMIC	0.1uF		50V	
C710	1-124-910-11	ELECT	47uF	20%	50V	
C711	1-164-159-11	CERAMIC	0.1uF		50V	
C801	1-124-907-11	ELECT	10uF	20%	50V	
C802	1-162-282-31	CERAMIC	100PF	10%	50V	
C803	1-162-282-31	CERAMIC	100PF	10%	50V	
C804	1-124-927-11	ELECT	4.7uF	20%	100V	
C806	1-136-165-00	FILM	0.1uF	5%	50V	
C807	1-136-165-00	FILM	0.1uF	5%	50V	
C808	1-136-165-00	FILM	0.1uF	5%	50V	
C809	1-136-165-00	FILM	0.1uF	5%	50V	(AEP)
C821	1-124-907-11	ELECT	10uF	20%	50V	
C822	1-162-282-31	CERAMIC	100PF	10%	50V	
C823	1-162-282-31	CERAMIC	100PF	10%	50V	
C824	1-124-927-11	ELECT	4.7uF	20%	100V	
C828	1-136-165-00	FILM	0.1uF	5%	50V	
C829	1-136-165-00	FILM	0.1uF	5%	50V	(AEP)
C831	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C832	1-162-306-11	CERAMIC	0.01uF	20%	16V	(G, IT)
C851	1-124-907-11	ELECT	10uF	20%	50V	
C852	1-162-282-31	CERAMIC	100PF	10%	50V	
C853	1-162-282-31	CERAMIC	100PF	10%	50V	
C854	1-124-927-11	ELECT	4.7uF	20%	100V	
C856	1-136-165-00	FILM	0.1uF	5%	50V	
C857	1-136-165-00	FILM	0.1uF	5%	50V	
C858	1-136-165-00	FILM	0.1uF	5%	50V	
C859	1-136-165-00	FILM	0.1uF	5%	50V	(AEP)
C871	1-124-907-11	ELECT	10uF	20%	50V	
C872	1-162-282-31	CERAMIC	100PF	10%	50V	
C873	1-162-282-31	CERAMIC	100PF	10%	50V	
C874	1-124-927-11	ELECT	4.7uF	20%	100V	
C878	1-136-165-00	FILM	0.1uF	5%	50V	
C879	1-136-165-00	FILM	0.1uF	5%	50V	(AEP)
C881	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C891	1-136-165-00	FILM	0.1uF	5%	50V	(G, IT)
C892	1-136-165-00	FILM	0.1uF	5%	50V	(G, IT)
C893	1-136-165-00	FILM	0.1uF	5%	50V	(G, IT)
C894	1-136-165-00	FILM	0.1uF	5%	50V	(G, IT)
C895	1-162-294-31	CERAMIC	0.001uF	10%	50V	(G, IT)
C896	1-162-294-31	CERAMIC	0.001uF	10%	50V	(G, IT)
C897	1-162-294-31	CERAMIC	0.001uF	10%	50V	(G, IT)
C898	1-162-294-31	CERAMIC	0.001uF	10%	50V	(G, IT)
C901	1-128-329-11	ELECT	10000uF	20%	42V	
C902	1-128-329-11	ELECT	10000uF	20%	42V	
C903	1-136-171-00	FILM	0.33uF	5%	50V	
C904	1-136-171-00	FILM	0.33uF	5%	50V	

〈 CONNECTOR 〉

Ref. No.	Part No.	Description	Remarks
CN411	* 1-580-739-11	SOCKET, CONNECTOR 15P	
CN412	* 1-580-740-11	SOCKET, CONNECTOR 17P	
CN413	1-563-314-11	CONNECTOR, BOARD TO BOARD 20P	
CN601	* 1-569-504-11	PIN, CONNECTOR 9P	
CN701	1-563-311-11	CONNECTOR, BOARD TO BOARD 10P	
CN702	* 1-564-518-11	PLUG, CONNECTOR 3P	
CN801	* 1-569-500-11	PIN, CONNECTOR 5P	
CN802	* 1-573-087-11	PIN, CONNECTOR 13P	
CN811	1-569-491-11	SOCKET, CONNECTOR 5P	
CN812	1-569-491-11	SOCKET, CONNECTOR 5P	
CN821	1-573-094-11	SOCKET, CONNECTOR 13P	

When indicating parts by reference number, please include the board name.

POWER SUPPLY POWER AMP TRANSFORMER(A) TRANSFORMER(B) JACK SPEAKER CONNECTOR(A) CONNECTOR(B)

Ref. No.	Part No.	Description	Remarks
CN822	1-573-094-11	SOCKET, CONNECTOR 13P	
CN831	* 1-573-087-11	PIN, CONNECTOR 13P	
CN832	1-566-128-11	CONNECTOR, BOARD TO BOARD 10P	
CN901	⚠ 1-526-930-11	INLET, AC (US, CND, E)	
CN901	⚠ 1-526-931-11	INLET, AC (Except US, CND, E)	
CN902	* 1-580-940-11	PIN, CONNECTOR 4P	
CN903	* 1-580-940-11	PIN, CONNECTOR 4P (E, EA)	
CN904	* 1-569-502-11	PIN, CONNECTOR 7P	
CN911	1-580-939-11	SOCKET, CONNECTOR 4P	
CN912	1-580-939-11	SOCKET, CONNECTOR 4P (E, EA)	
CN913	1-569-493-11	SOCKET, CONNECTOR 7P	
CN914	* 1-569-502-11	PIN, CONNECTOR 7P	
CN921	* 1-569-502-11	PIN, CONNECTOR 7P	
CN922	1-569-496-11	SOCKET, CONNECTOR 10P	
		(DIODE)	
D701	8-719-912-20	DIODE 1SS120	
D702	8-719-912-20	DIODE 1SS120	
D703	8-719-912-20	DIODE 1SS120	
D704	8-719-912-20	DIODE 1SS120	
D705	8-719-912-20	DIODE 1SS120	
D706	8-719-912-20	DIODE 1SS120	
D801	8-719-912-20	DIODE 1SS120	
D802	8-719-912-20	DIODE 1SS120	
D811	8-719-912-20	DIODE 1SS120	
D812	8-719-912-20	DIODE 1SS120	
D821	8-719-912-20	DIODE 1SS120	
D822	8-719-912-20	DIODE 1SS120	
D851	8-719-912-20	DIODE 1SS120	
D852	8-719-912-20	DIODE 1SS120	
D871	8-719-912-20	DIODE 1SS120	
D872	8-719-912-20	DIODE 1SS120	
D901	8-719-302-38	DIODE RBV-602-01	
D902	8-719-912-20	DIODE 1SS120	
D903	8-719-912-20	DIODE 1SS120	
		(FUSE)	
F901	⚠ 1-532-388-51	FUSE T2A (Except US, CND)	
F901	⚠ 1-576-108-11	FUSE 4A (US, CND)	
F902	⚠ 1-532-350-00	FUSE T4A (E, EA)	
F911	⚠ 1-532-783-21	FUSE, MICRO (SECONDARY) 5A (US, CND)	
F912	⚠ 1-532-783-21	FUSE, MICRO (SECONDARY) 5A (US, CND)	
		(IC)	
IC701	8-759-111-68	IC uPC1237HA	
IC702	8-759-987-16	IC LM393P	
IC703	8-759-512-73	IC LM35DZ-SL	
IC801	8-759-514-90	IC LM3875-1	
IC821	8-759-323-30	IC LM3875	
IC851	8-759-514-90	IC LM3875-1	
IC871	8-759-323-30	IC LM3875	
		(IC LINK)	
ICP402	⚠ 1-532-845-21	LINK, IC (Except US, CND)	
ICP403	⚠ 1-532-845-21	LINK, IC (Except US, CND)	
ICP911	⚠ 1-532-846-21	LINK, IC (Except US, CND)	
ICP912	⚠ 1-532-846-21	LINK, IC (Except US, CND)	
		(JACK)	
J401	1-565-304-11	JACK, PIN 4P (E, EA)	
J402	1-569-662-11	JACK, PIN 1P	
J601	1-562-837-21	JACK	
J611	1-562-837-21	JACK	
		(COIL)	
L801	* 1-420-872-00	COIL, AIR CORE	
L821	* 1-420-872-00	COIL, AIR CORE	
L851	* 1-420-872-00	COIL, AIR CORE	
L871	* 1-420-872-00	COIL, AIR CORE	
		(LINE FILTER)	
LF901	⚠ 1-424-485-11	FILTER, LINE (G, IT)	
		(TRANSISTOR)	
Q611	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q612	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q701	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q702	8-729-801-84	TRANSISTOR 2SB1013-4	
Q801	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q821	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q851	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q871	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
		(RESISTOR)	
R401	1-249-417-11	CARBON 1K 5% 1/4W	
R451	1-249-417-11	CARBON 1K 5% 1/4W	
R605	1-249-405-11	CARBON 100 5% 1/4W	
R606	1-249-429-11	CARBON 10K 5% 1/4W	
R611	1-249-429-11	CARBON 10K 5% 1/4W	
R612	1-249-417-11	CARBON 1K 5% 1/4W	
R613	1-249-429-11	CARBON 10K 5% 1/4W	
R614	1-249-441-11	CARBON 100K 5% 1/4W	
R615	1-249-429-11	CARBON 10K 5% 1/4W	
R616	1-249-429-11	CARBON 10K 5% 1/4W	
R617	1-249-441-11	CARBON 100K 5% 1/4W	
R618	1-249-441-11	CARBON 100K 5% 1/4W	
R619	1-247-903-00	CARBON 1M 5% 1/4W	
R620	1-249-441-11	CARBON 100K 5% 1/4W	
R655	1-249-405-11	CARBON 100 5% 1/4W	
R701	1-249-433-11	CARBON 22K 5% 1/4W	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

POWER SUPPLY **POWER AMP** **TRANSFORMER(A)** **TRANSFORMER(B)**
JACK **SPEAKER** **CONNECTOR(A)** **CONNECTOR(B)**

Ref. No.		Part No.	Description				Remarks
R702		1-249-441-11	CARBON	100K	5%	1/4W	
R703		1-249-433-11	CARBON	22K	5%	1/4W	
R704		1-249-433-11	CARBON	22K	5%	1/4W	
R705		1-249-429-11	CARBON	10K	5%	1/4W	
R706		1-249-429-11	CARBON	10K	5%	1/4W	
R707		1-249-429-11	CARBON	10K	5%	1/4W	
R708		1-249-424-11	CARBON	3.9K	5%	1/4W	
R709		1-249-427-11	CARBON	6.8K	5%	1/4W	
R710		1-249-429-11	CARBON	10K	5%	1/4W	
R711		1-249-417-11	CARBON	1K	5%	1/4W	
R712		1-249-437-11	CARBON	47K	5%	1/4W	
R713		1-249-429-11	CARBON	10K	5%	1/4W	
R714		1-249-417-11	CARBON	1K	5%	1/4W	
R715	⚠	1-213-072-61	FUSIBLE	33	5%	1W	F
R800		1-249-393-11	CARBON	10	5%	1/4W	(US, CND)
R801		1-249-417-11	CARBON	1K	5%	1/4W	
R802		1-249-434-11	CARBON	27K	5%	1/4W	
R803		1-249-412-11	CARBON	390	5%	1/4W	
R804		1-249-434-11	CARBON	27K	5%	1/4W	
R805	⚠	1-217-151-00	RES, METAL PLATE	0.22		2W	
R806		1-249-417-11	CARBON	1K	5%	1/4W	
R807		1-249-431-11	CARBON	15K	5%	1/4W	
R808		1-249-441-11	CARBON	100K	5%	1/4W	
R809	⚠	1-212-958-00	FUSIBLE	10	5%	1/2W	F
R810		1-249-439-11	CARBON	68K	5%	1/4W	
R811		1-249-429-11	CARBON	10K	5%	1/4W	
R821		1-249-417-11	CARBON	1K	5%	1/4W	
R822		1-249-434-11	CARBON	27K	5%	1/4W	
R823		1-249-411-11	CARBON	330	5%	1/4W	
R824		1-249-434-11	CARBON	27K	5%	1/4W	
R825	⚠	1-217-151-00	RES, METAL PLATE	0.22		2W	
R826		1-249-417-11	CARBON	1K	5%	1/4W	
R827		1-249-431-11	CARBON	15K	5%	1/4W	
R828		1-249-441-11	CARBON	100K	5%	1/4W	
R829	⚠	1-212-958-00	FUSIBLE	10	5%	1/2W	F
R830		1-249-437-11	CARBON	47K	5%	1/4W	
R831		1-249-429-11	CARBON	10K	5%	1/4W	
R851		1-249-417-11	CARBON	1K	5%	1/4W	
R852		1-249-434-11	CARBON	27K	5%	1/4W	
R853		1-249-412-11	CARBON	390	5%	1/4W	
R854		1-249-434-11	CARBON	27K	5%	1/4W	
R855	⚠	1-217-151-00	RES, METAL PLATE	0.22		2W	
R856		1-249-417-11	CARBON	1K	5%	1/4W	
R857		1-249-431-11	CARBON	15K	5%	1/4W	
R858		1-249-441-11	CARBON	100K	5%	1/4W	
R859	⚠	1-212-958-00	FUSIBLE	10	5%	1/2W	F
R860		1-249-438-11	CARBON	56K	5%	1/4W	
R861		1-249-429-11	CARBON	10K	5%	1/4W	
R871		1-249-417-11	CARBON	1K	5%	1/4W	
R872		1-249-434-11	CARBON	27K	5%	1/4W	
R873		1-249-411-11	CARBON	330	5%	1/4W	
R874		1-249-434-11	CARBON	27K	5%	1/4W	
R875	⚠	1-217-151-00	RES, METAL PLATE	0.22		2W	
R876		1-249-417-11	CARBON	1K	5%	1/4W	
R877		1-249-431-11	CARBON	15K	5%	1/4W	
R878		1-249-441-11	CARBON	100K	5%	1/4W	
R879	⚠	1-212-958-00	FUSIBLE	10	5%	1/2W	F
R880		1-249-436-11	CARBON	39K	5%	1/4W	
R881		1-249-429-11	CARBON	10K	5%	1/4W	
R891	⚠	1-247-727-11	CARBON	10	5%	1/2W	(G, IT)
R892	⚠	1-247-727-11	CARBON	10	5%	1/2W	(G, IT)
R893	⚠	1-247-727-11	CARBON	10	5%	1/2W	(G, IT)
R894	⚠	1-247-727-11	CARBON	10	5%	1/2W	(G, IT)
R901	⚠	1-202-725-00	SOLID	3.3M	10%	1/2W	(US, CND)
R902		1-249-429-11	CARBON	10K	5%	1/4W	
R921	⚠	1-212-857-00	FUSIBLE	10	5%	1/4W	F

(VARIABLE RESISTOR)

RV611		1-241-140-11	RES, VAR, CARBON 10K (MIC LEVEL)

(RELAY)

RY801		1-515-790-11	RELAY
RY802		1-515-790-11	RELAY
RY901		1-515-626-11	RELAY

(VOLTAGE SELECTOR)

S901	⚠	1-572-009-11	SELECTOR, VOLTAGE (E, EA)

(TRANSFORMER)

T1	⚠	1-450-375-11	TRANSFORMER, POWER (AEP, G, IT)
T1	⚠	1-450-376-11	TRANSFORMER, POWER (UK, AUS)
T1	⚠	1-450-377-11	TRANSFORMER, POWER (E, EA)
T1	⚠	1-450-378-11	TRANSFORMER, POWER (US, CND)

(TERMINAL BOARD)

TB801		1-537-336-11	TERMINAL BOARD (SP)

****

MISCELLANEOUS
****

	⚠	1-541-860-11	MOTOR, DC FAN
		1-535-706-11	PLUG, JUMPER (E, EA)
	*	1-533-213-31	HOLDER, FUSE

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

CDP-H3600

SERVICE MANUAL

AEP Model
UK Model

This set is the
CD player section in
MHC-2600/3600

Model Name Using Similar Mechanism	CDP-H300
CD Mechanism Type	CDM13B-5BD3
Base Unit Name	BU-5BD3

TABLE OF CONTENTS

Section Title Page

1. GENERAL

Location of Controls 3
2. ELECTRICAL BLOCK CHECKING 4

3. DIAGRAMS

3-1. Block Diagram 7
3-2. Semiconductor Lead Layouts 10
3-3. Printing Wiring Boards 10
3-4. Schematic Diagram 13
3-5. IC Block Diagrams 16
3-6. Pin Function of IC202 and IC401 18

4. EXPLODED VIEWS

(1) Chassis Section 20
(2) CD Mechanism Section 21
(3) Optical Pick-Up Block 22
5. ELECTRICAL PARTS LIST 23

SPECIFICATIONS

System	Compact disc digital audio system
Laser	Semiconductor laser (λ = 780 nm) Emission duration: continuous
Laser output	Max. 44.6 μW* * This output is the value measured at a distance of about 200 mm from the objective lens surface on the Optical Pick-up Block.
Signal to noise ratio	More than 90 dB
Dynamic range	More than 90 dB
Harmonic distortion	Less than 0.05% (at 1 kHz)
Channel separation	More than 90 dB
Output level	2 V (at 50 kilohms)
Load impedance	More than 10 kilohms
Outputs	DIGITAL OUT OPTICAL (optical output connector): wave length 660 nm, output level –18 dBm

CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT label is located on the rear exterior.

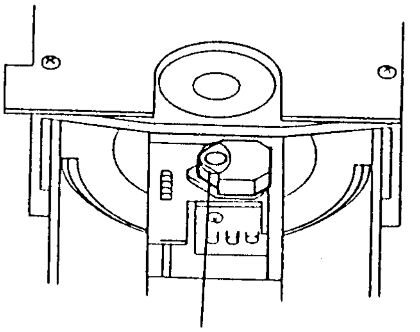
COMPACT DISC PLAYER

SONY®

http://www.manualscenter.com

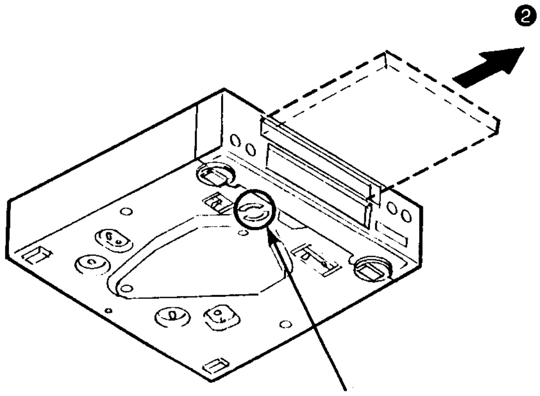
LASER DIODE AND FOCUS SERCH OPERATION CHECK

1. Make POWER switch on with no disc inserted and disc table closed.
2. Confirm that the following operation is performed while observing the objective lens.

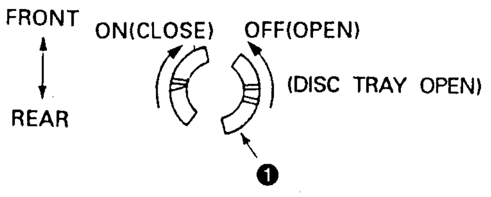


❶ Confirm that laser beam is spread.
❷ Up and down motion of the objective lens. (3 times)

HOW TO OPEN THE DISC TRAY WHEN POWER SWITCH TURNS OFF



BOTTOM VIEW



(1) Insert to ❶ for tapering driver, etc., and turn in the direction of arrow OFF. (Disc tray open)
(2) Tray as come out little of front panel, pull out in the direction of arrow ❷ by hand.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective sureface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1

GENERAL

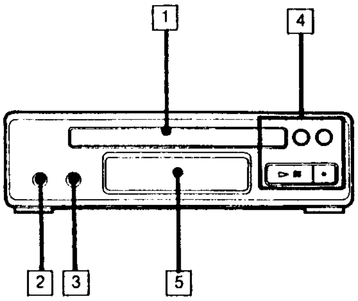
LOCATION OF CONTROLS

This section is extracted from instruction manual.

CD Player Section D

- [1] Disc tray
- [2] CHECK button
- [3] EDIT/TIME FADE button
- [4] CD operation buttons
  - ⏏ : OPEN/CLOSE
  - ▷❚❚ : Play/pause
  - ◀◀ |◁◁ ▷▷| ▶▶ : Manual search (when kept depressed)/Automatic Music Sensor (when pressed)
- [5] Display window

D



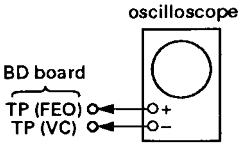
http://www.manualscenter.com

SECTION 2
ELECTRICAL BLOCK CHECKING

Note :

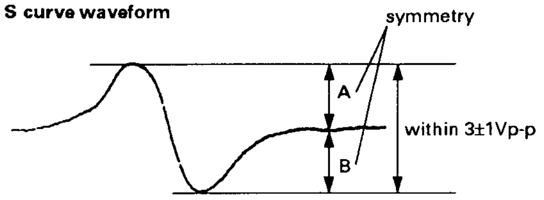
1. CD Block basically constructed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use the oscilloscope with more than 10MΩ impedance.
4. Clean an object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

S Curve Check


oscilloscope
BD board
TP (FEO)
TP (VC)
+
−

Procedure :

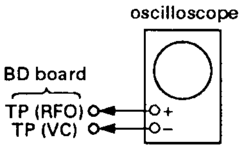
1. Connect oscilloscope to test point TP (FEO) on BD board.
2. Connect between test point TP (FES) and TP (VC) by lead wire.
3. Turned Power switch on and actuate the focus serch. (actuate the focus serch when disc table is moving in and out.)
4. Check the oscilloscope waveform (S curve) is symmetrical between A and B. And confirm peak to peak level within 3±1Vp-p.


S curve waveform
symmetry
A
B
within 3±1Vp-p

5. After check, remove the lead wire connected in step 2.

Note : • Try to measure several times to make sure that the ratio of A : B or B : A is more than 10 : 7.
• Take sweep time as long as possible and light up the brightness to obtain best waveform.

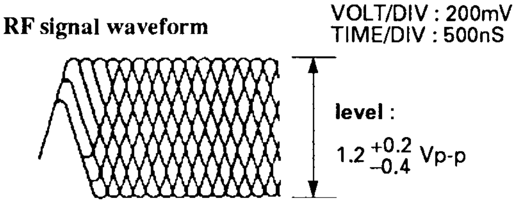
RF Level Check


oscilloscope
BD board
TP (RFO)
TP (VC)
+
−

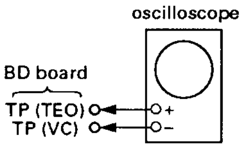
Procedure :

1. Connect oscilloscope to test point TP (RFO) on BD board.
2. Turn Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note :
Clear RF signal waveform means that the shape " ◊ " can be clearly distinguished at the center of the waveform.

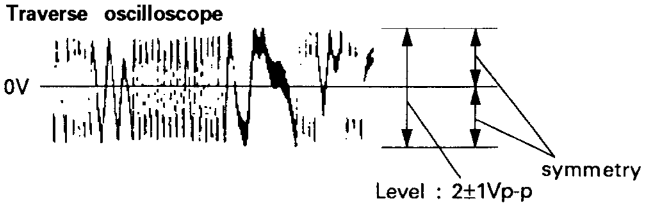

RF signal waveform
VOLT/DIV : 200mV
TIME/DIV : 500nS
level :
1.2 +0.2 −0.4 Vp-p

E-F Balance Check


oscilloscope
BD board
TP (TEO)
TP (VC)
+
−

Procedure :

1. Connect test point TP (ADJ) to ground and TP (TES) to TP (VC) with lead wire.
2. Connect oscilloscope to test point TP (TEO) on BD board.
3. Turn Power switch on.
4. Put disc (YEDS-18) in and playback.
5. Confirm that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0V, and check this level.

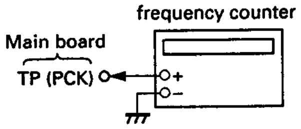

Traverse oscilloscope
0V
symmetry
Level : 2±1Vp-p

6. Remove the lead wire connected in step 1.

RF PLL Free-run Frequency Check

Procedure :

1. Connect frequency counter to test point (PCK) with lead wire.

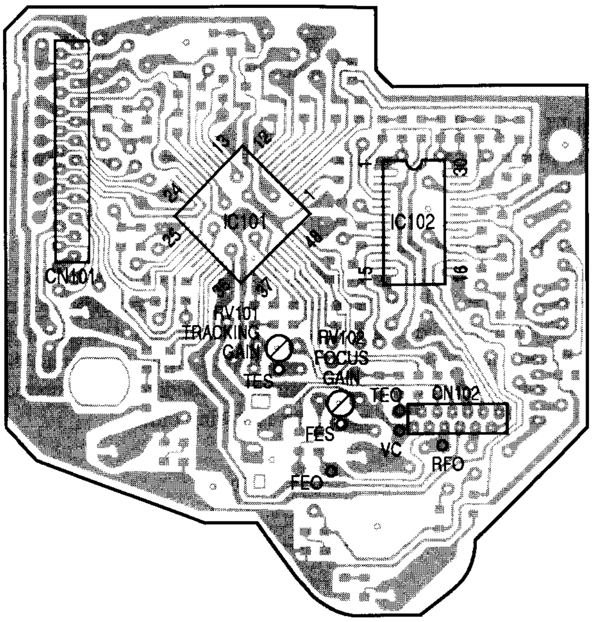

frequency counter
Main board
TP (PCK)
+
−

2. Turn Power switch on.
3. Confirm that reading on frequency counter is 4.3218MHz.

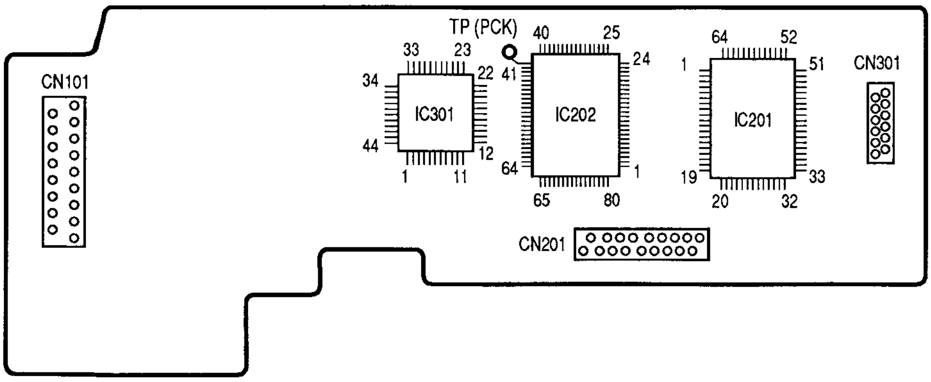
Focus/Tracking Gain

This gain has a margin, so even if it is slightly off.
There is no problem.
Therefore, do not perform, this adjustment.
Please note that it should be fixed to mechanical center position when you moved and do not know original position.

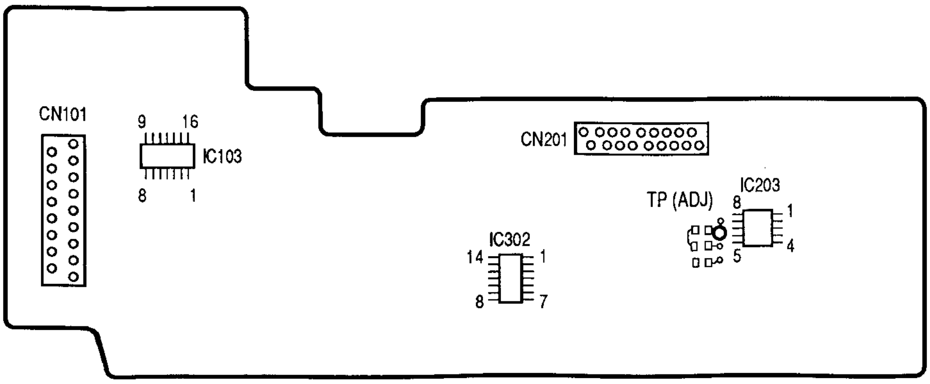
[BD BOARD] – Conductor Side –


IC101
IC102
CN101
CN102
RV101
TRACKING
GAIN
RV102
FOCUS
GAIN
TES
TEO
FES
FEO
VC
RFO
1
12
13
24
25
36
37
48
1
15
16
30

[MAIN BOARD] – Component Side –


CN101
TP (PCK)
IC301
33
23
22
34
44
12
1
11
IC202
40
25
41
24
64
1
65
80
IC201
64
52
1
51
19
33
20
32
CN301
CN201

[MAIN BOARD] – Conductor Side –


CN101
9
16
IC103
8
1
CN201
IC302
14
1
8
7
TP (ADJ)
IC203
8
1
5
4

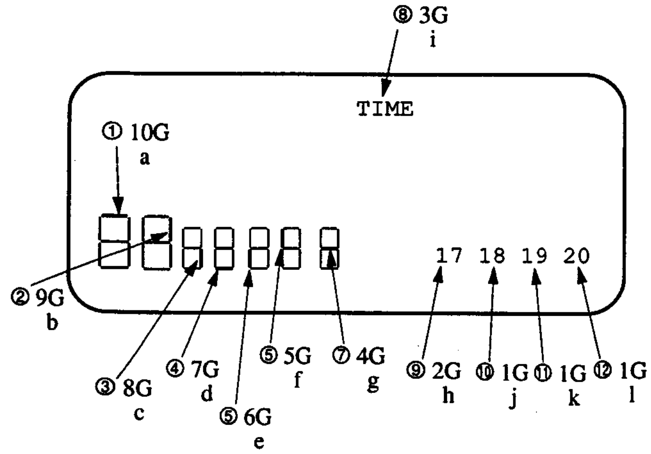
[TEST MODES]

1. Test mode of display micon (IC401)

Connect Pin (33) of IC401 to ground and turn ON the POWER switch, thus you can test the following 3 tests.

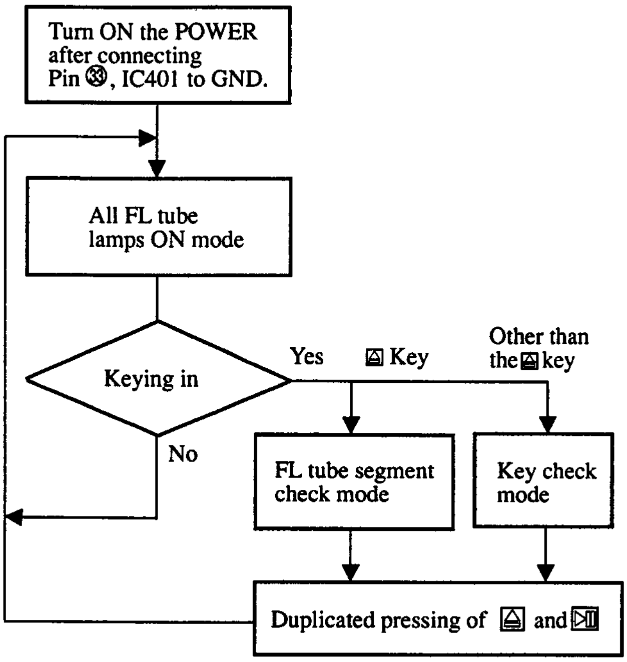
(1) All FL tube ON
This mode is actuated immediately after turning ON the POWER switch.

(2) FL tube segment check
This mode is actuated by pressing the [⏏] key in the state of (1). Every time the [⏏] key is pressed, the segments are indicated sequentially from the segment a. When the last l segment is displayed, keying in is no longer accepted while continuing the lighting-up state of the last segment. Conditions are normal provided all lamps light up in the following order.


⑧ 3G
i
TIME
① 10G
a
② 9G
b
③ 8G
c
④ 7G
d
⑤ 6G
e
⑤ 5G
f
⑦ 4G
g
17 18 19 20
⑨ 2G
h
⑩ 1G
j
⑪ 1G
k
⑫ 1G
l

(3) KEY check
This mode is effected by pressing the [⏏] key in the state of (1), while indicating "1." Every time a new key is pressed subsequently, the indicated number is incremented. Conditions are normal provided "7" is indicated when all types of keys are pressed. Even if a key is pressed again, it is not counted.

* To leave the mode (2) or (3), press the [⏏] and [⏯] keys in duplication, thereby the mode returning to all ON mode.


Turn ON the POWER after connecting Pin (33), IC401 to GND.
All FL tube lamps ON mode
Keying in
Yes
No
⏏ Key
Other than the ⏏ key
FL tube segment check mode
Key check mode
Duplicated pressing of ⏏ and ⏯

2. Test Modes of CD Syscon (IC202)

(1) ADJUST mode
When this mode is effected, the machine is operated normally except for the following.

- When pin ⑲, IC202 (ADJ) is set to "L" after turning ON the POWER switch:

1. GFS is no longer monitored during PLAY, PAUSE or SEARCH, while not stopping even with GFS remaining still at "L" (NG).
2. No high-speed feeding is activated during SEARCH.
3. Focus gain is reset to normal gain during PLAY (normally, the gain is lowered to reduce noise when FOCUS is locked).

- When Pin ⑬, IC202 (AFADJ) is set to "L" after turning ON the POWER switch:

1. Regardless of Pin ⑲ (ADJ) of the CLV-S fixed function, the CLV mode during PLAY becomes CLV-S (rough servo) only while Pin e remains "L".

(2) AFADJUST mode
In this mode, it is possible to check the interface between the display micon (IC401) and CD syscon (IC202).

- Set Pin ⑬, IC202 (AFADJ) to "L" before turning ON the POWER switch.

1. Every time the [⏏] key is pressed after turning On the POWER switch, indication on the FL tube is switched correspondingly. Conditions are normal provided the indication repeats the 4 patterns including all lamp ON.

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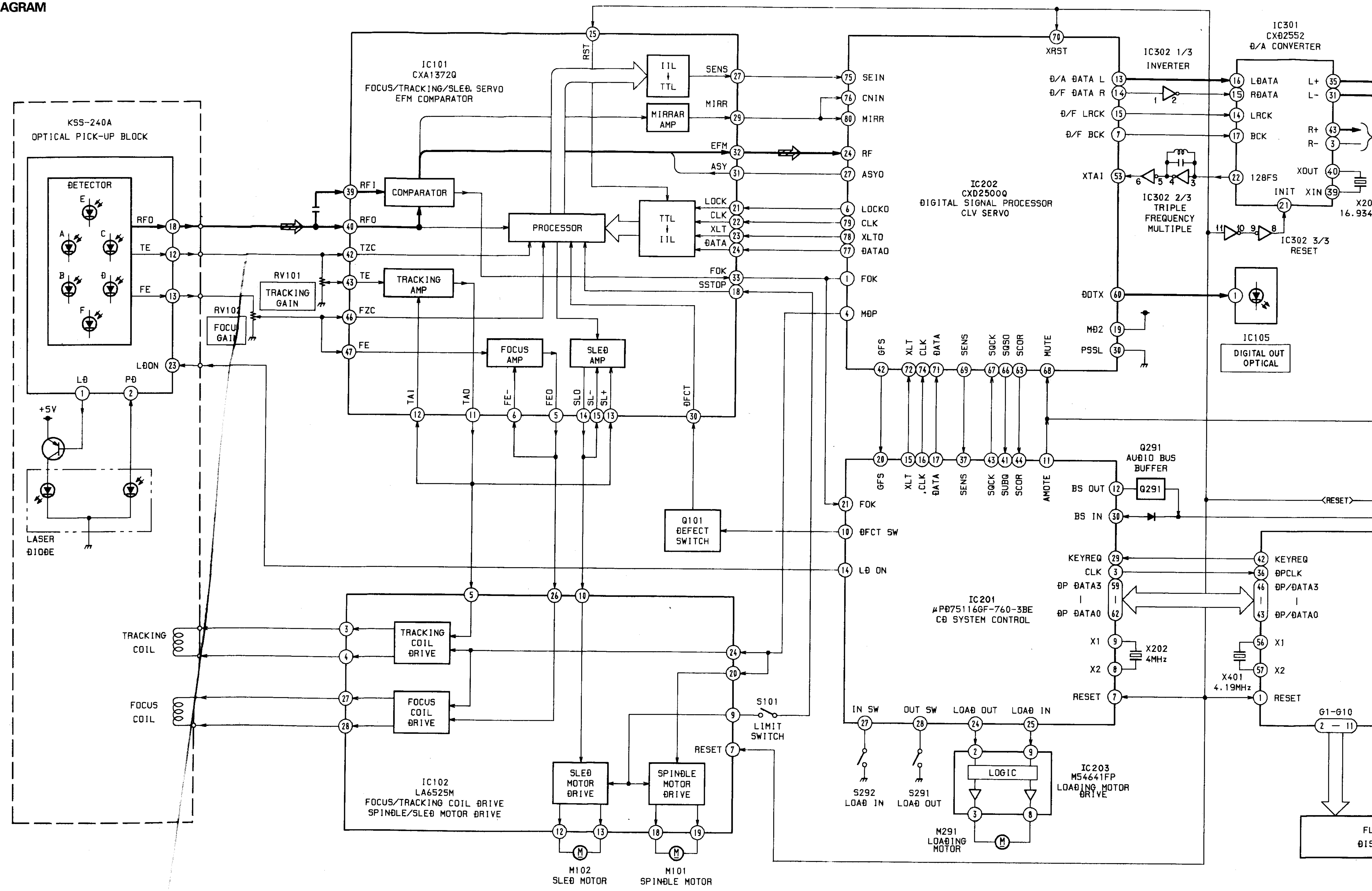
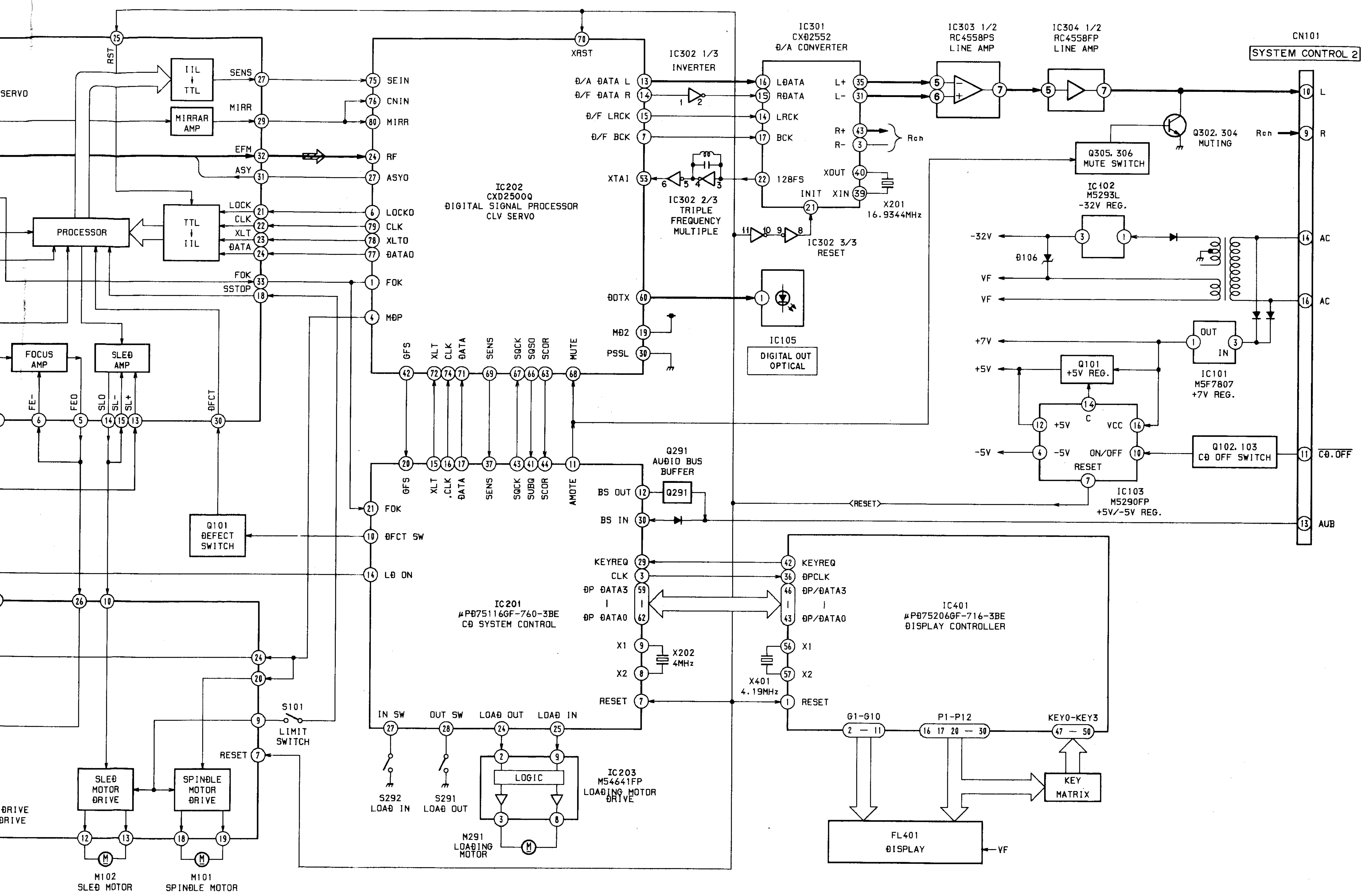
SECTION 3
DIAGRAMS

3-1. BLOCK DIAGRAM


KSS-240A
OPTICAL PICK-UP BLOCK
DETECTOR
E
A
C
B
D
F
RFO
TE
FE
LDON
LD
PD
+5V
LASER
DIODE
TRACKING
COIL
FOCUS
COIL
IC101
CXA1372Q
FOCUS/TRACKING/SLED SERVO
EFM COMPARATOR
RST
IIL
TTL
SENS
MIRRAR
AMP
MIRR
EFM
ASY
COMPARATOR
RFI
RFO
PROCESSOR
TTL
IIL
LOCK
CLK
XLT
DATA
TZC
TE
FZC
FE
FOK
SSTOP
RV101
TRACKING
GAIN
RV102
FOCUS
GAIN
TRACKING
AMP
FOCUS
AMP
SLED
AMP
TAI
TAO
FE-
FEO
SLO
SL-
SL+
DFCT
Q101
DEFECT
SWITCH
TRACKING
COIL
DRIVE
FOCUS
COIL
DRIVE
SLED
MOTOR
DRIVE
SPINDLE
MOTOR
DRIVE
RESET
S101
LIMIT
SWITCH
IC102
LA6525M
FOCUS/TRACKING COIL DRIVE
SPINDLE/SLED MOTOR DRIVE
M102
SLED MOTOR
M101
SPINDLE MOTOR
XRST
SEIN
CNIN
MIRR
RF
ASYO
LOCKO
CLK
XLTO
DATAO
FOK
MDP
IC202
CXD2500Q
DIGITAL SIGNAL PROCESSOR
CLV SERVO
GFS
XLT
CLK
DATA
SENS
SQCK
SUBQ
SCOR
MUTE
D/A DATA L
D/F DATA R
D/F LRCK
D/F BCK
XTAI
DOTX
MD2
PSSL
IC302 1/3
INVERTER
IC302 2/3
TRIPLE
FREQUENCY
MULTIPLE
IC302 3/3
RESET
IC301
CXD2552
D/A CONVERTER
LDATA
RDATA
LRCK
BCK
128FS
INIT
L+
L-
R+
R-
XOUT
XIN
X20
16.934
IC105
DIGITAL OUT
OPTICAL
Q291
AUDIO BUS
BUFFER
BS OUT
BS IN
<RESET>
FOK
DFCT SW
LD ON
GFS
XLT
CLK
DATA
SENS
SQCK
SUBQ
SCOR
AMUTE
KEYREQ
CLK
DP DATA3
DP DATA0
IC201
μPD75116GF-760-3BE
CD SYSTEM CONTROL
X1
X2
X202
4MHz
RESET
KEYREQ
DPCLK
DP/DATA3
DP/DATA0
X1
X2
X401
4.19MHz
RESET
G1-G10
IN SW
OUT SW
LOAD OUT
LOAD IN
S292
LOAD IN
S291
LOAD OUT
LOGIC
IC203
M54641FP
LOADING MOTOR
DRIVE
M291
LOADING
MOTOR
M
FL
DIS

http://www.manualscenter.com



SERVO
RST
IIL → TTL
SENS
MIRRAR AMP
MIRR
EFM
ASY
PROCESSOR
TTL → IIL
LOCK
CLK
XLT
DATA
FOK
SSTOP
FOCUS AMP
SLED AMP
FE-
FEO
SLO
SL-
SL+
DFCT
Q101 DEFECT SWITCH
XRST
SEIN
CNIN
MIRR
RF
ASYO
LOCKO
CLK
XLTO
DATAO
FOK
MDP
IC202 CXD2500Q DIGITAL SIGNAL PROCESSOR CLV SERVO
D/A DATA L
D/F DATA R
D/F LRCK
D/F BCK
XTAI
DOTX
MD2
PSSL
GFS
XLT
CLK
DATA
SENS
SQCK
SQSO
SCOR
MUTE
IC302 1/3 INVERTER
IC302 2/3 TRIPLE FREQUENCY MULTIPLE
IC302 3/3 RESET
IC301 CXD2552 D/A CONVERTER
LDATA
RDATA
LRCK
BCK
128FS
INIT
L+
L-
R+
R-
Rch
XOUT
XIN
X201 16.9344MHz
IC105 DIGITAL OUT OPTICAL
IC303 1/2 RC4558PS LINE AMP
IC304 1/2 RC4558FP LINE AMP
Q302, 304 MUTING
Q305, 306 MUTE SWITCH
CN101 SYSTEM CONTROL 2
L
Rch
R
IC102 M5293L -32V REG.
-32V
D106
VF
VF
AC
AC
+7V
+5V
-5V
Q101 +5V REG.
OUT
IN
IC101 M5F7807 +7V REG.
+5V
VCC
C
-5V
ON/OFF
RESET
Q102, 103 CD OFF SWITCH
CD.OFF
IC103 M5290FP +5V/-5V REG.
AUB
<RESET>
GFS
XLT
.CLK
DATA
SENS
SQCK
SUBQ
SCOR
AMOTE
Q291 AUDIO BUS BUFFER
BS OUT
BS IN
Q291
FOK
DFCT SW
LD ON
IC201 μPD75116GF-760-3BE CD SYSTEM CONTROL
KEYREQ
CLK
DP DATA3
DP DATA0
X1
X2
X202 4MHz
RESET
IN SW
OUT SW
LOAD OUT
LOAD IN
S292 LOAD IN
S291 LOAD OUT
LOGIC
IC203 M54641FP LOADING MOTOR DRIVE
M291 LOADING MOTOR
S101 LIMIT SWITCH
RESET
SLED MOTOR DRIVE
SPINDLE MOTOR DRIVE
DRIVE
DRIVE
M102 SLED MOTOR
M101 SPINDLE MOTOR
KEYREQ
DPCLK
DP/DATA3
DP/DATA0
IC401 μPD75206GF-716-3BE DISPLAY CONTROLLER
X1
X2
X401 4.19MHz
RESET
G1-G10
P1-P12
KEY0-KEY3
KEY MATRIX
FL401 DISPLAY
VF

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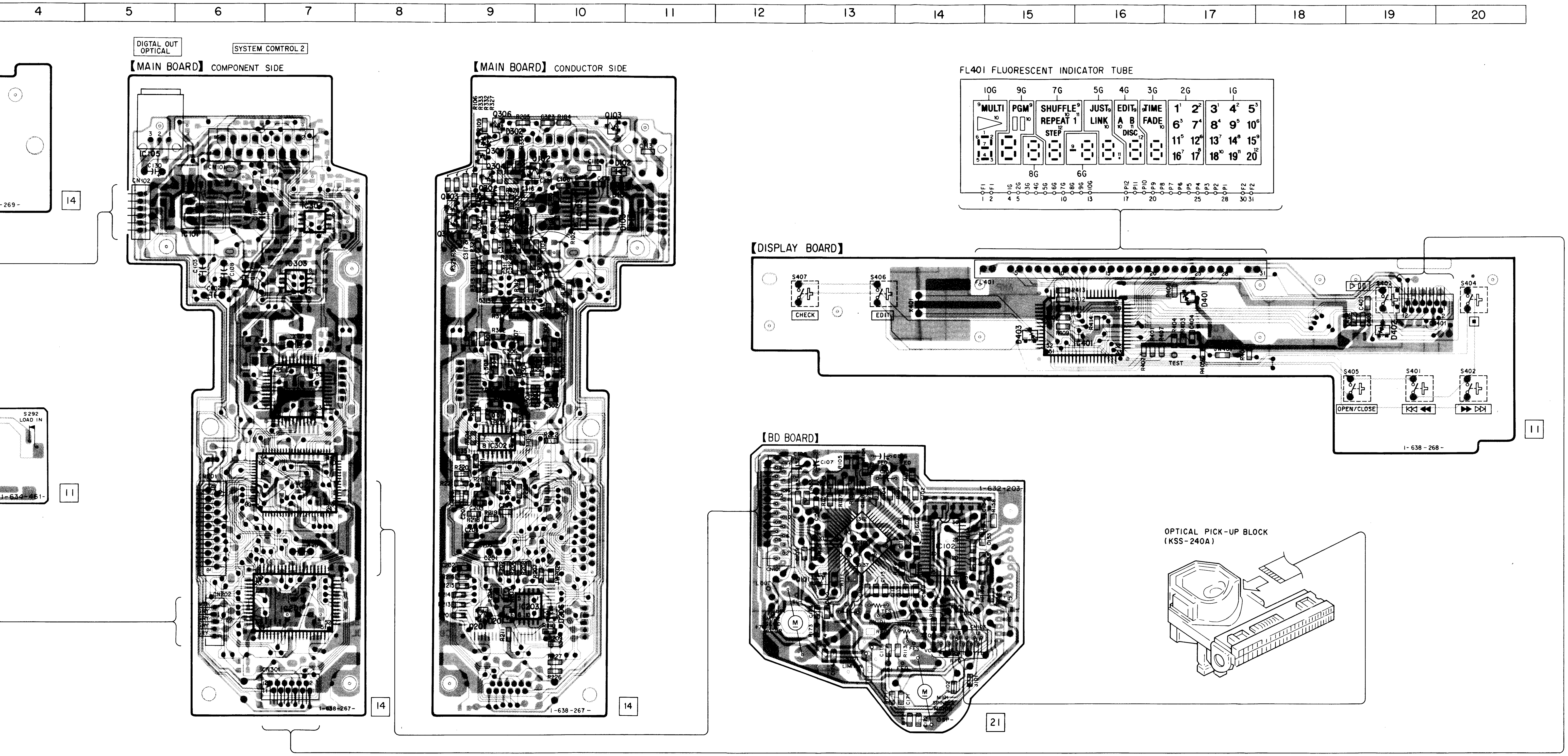
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
DIGTAL OUT OPTICAL
SYSTEM COMTROL 2
【MAIN BOARD】 COMPONENT SIDE
【MAIN BOARD】 CONDUCTOR SIDE
FL401 FLUORESCENT INDICATOR TUBE
10G 9G 7G 5G 4G 3G 2G 1G
MULTI
PGM
SHUFFLE
REPEAT 1
STEP
JUST
LINK
EDIT
A B
DISC
TIME
FADE
8G
6G
【DISPLAY BOARD】
S407
CHECK
S406
EDIT
FL401
D401
D402
D403
IC401
TEST
S404
S403
S405
OPEN/CLOSE
S401
S402
1-638-268-
【BD BOARD】
1-632-203-
M101
SPINDLE
OPTICAL PICK-UP BLOCK
(KSS-240A)
CN102
IC105
IC101
IC301
IC302
IC303
IC201
IC202
IC203
CN202
CN301
1-638-267-
-269-
S292
LOAD IN
1-634-461-
14
14
14
11
11
21

nted on the component side.
unted on the conductor side.

ich enables seeing.

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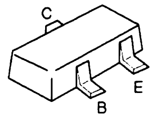
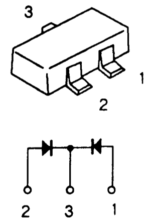
3-2. SEMICONDUCTOR LEAD LAYOUTS

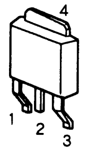
DTC144EK
2SA1162-G
2SC3052-EF
2SC3624A-L15



MA152WK

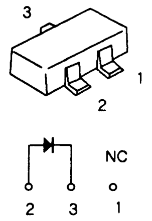


2SA1341
2SB1122-S

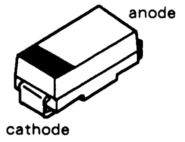


1 : BASE
2 : COLLECTOR
3 : EMITTER
4 : COLLECTOR

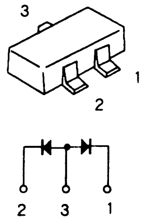
RD4.7M-B3
RD6.8M-B2
RD8.2M-B3



EC10DS2
EC10QS-04


anode
cathode

1S2836



• SEMICONDUCTOR LOCATION

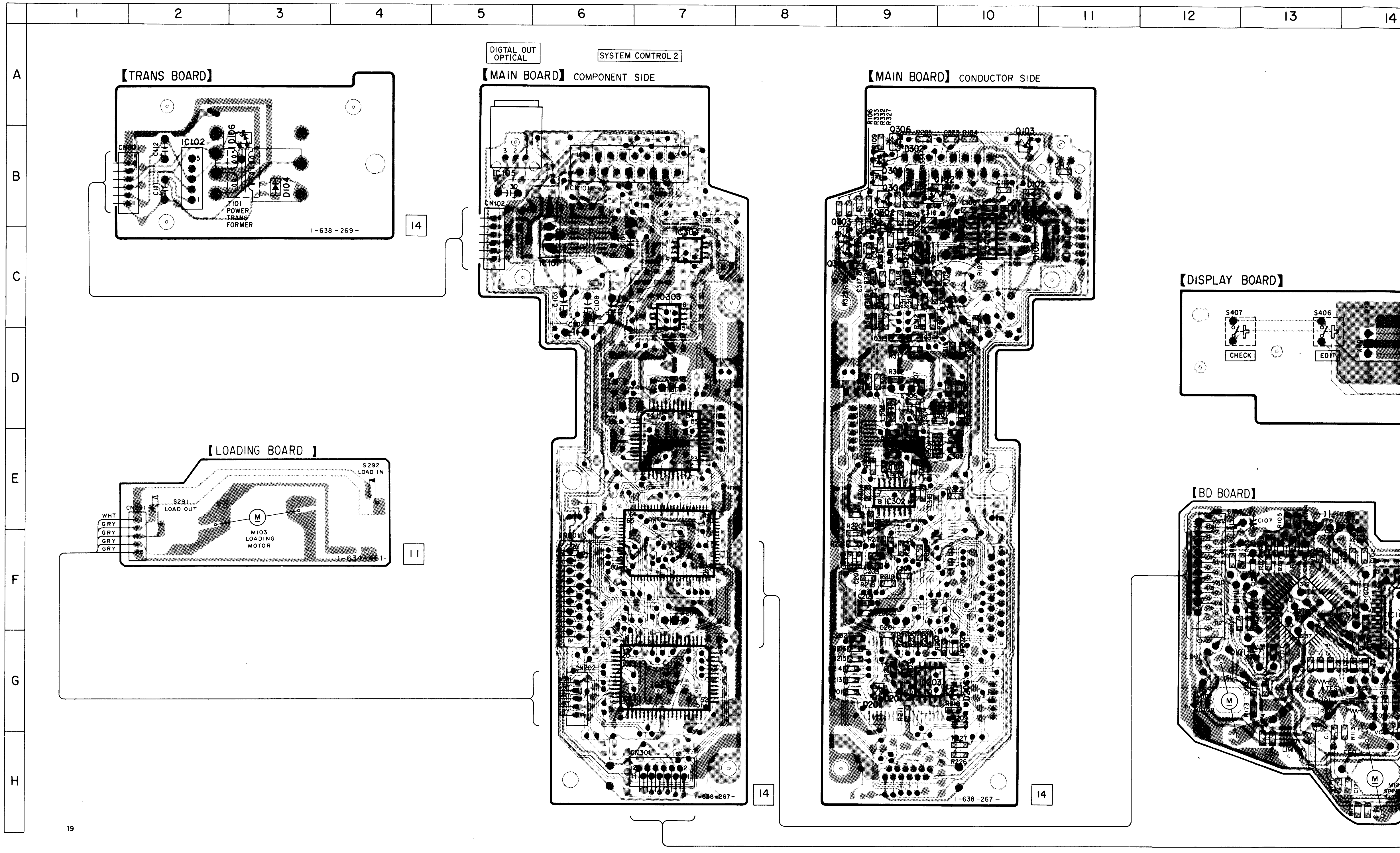
BD BOARD

Ref. No.	LOCATION
Q101	F-13
IC101	F-13
IC102	F-14

EXCEPT BD BOARD

Ref. No.	LOCATION
D101	B-10
D102	B-10
D103	C-11
D201	G-9
D206	G-10
D301	D-9
D302	B-9
D401	D-17
D402	D-19
D403	D-15
IC101	C-6
IC102	B-2
IC103	C-10
IC105	B-5
IC201	G-7
IC202	F-7
IC203	G-9
IC301	E-7
IC302	E-9
IC303	C-7
IC304	C-7
IC401	D-15
Q101	C-9
Q102	B-9
Q103	B-10
Q201	G-9
Q301	C-9
Q302	B-9
Q303	C-9
Q304	B-9
Q305	B-9
Q306	B-9

3-3. PRINTED WIRING BOARDS


1 2 3 4 5 6 7 8 9 10 11 12 13 14
A B C D E F G H
【TRANS BOARD】
CN001
IC102
D106
D104
T101 POWER TRANS FORMER
1-638-269-
14
DIGTAL OUT OPTICAL
SYSTEM COMTROL 2
【MAIN BOARD】 COMPONENT SIDE
IC105
C130
CN102
CN101
IC101
IC303
CN201
CN202
CN301
1-638-267-
14
【MAIN BOARD】 CONDUCTOR SIDE
Q306
Q103
D102
IC302
IC203
1-638-267-
14
【LOADING BOARD】
S292 LOAD IN
S291 LOAD OUT
CN401
WHT
GRY
GRY
GRY
GRY
M103 LOADING MOTOR
1-634-461-
11
【DISPLAY BOARD】
S407
S406
CHECK
EDIT
【BD BOARD】
C107
M
19

Note:

- ○——— : indicated a lead wire mounted on the component side.
- •——— : indicated a lead wire mounted on the conductor side.
- ● : Through hole.
- ▨ : Pattern from the side which enables seeing.
- ▨ : Pattern of the rear side.

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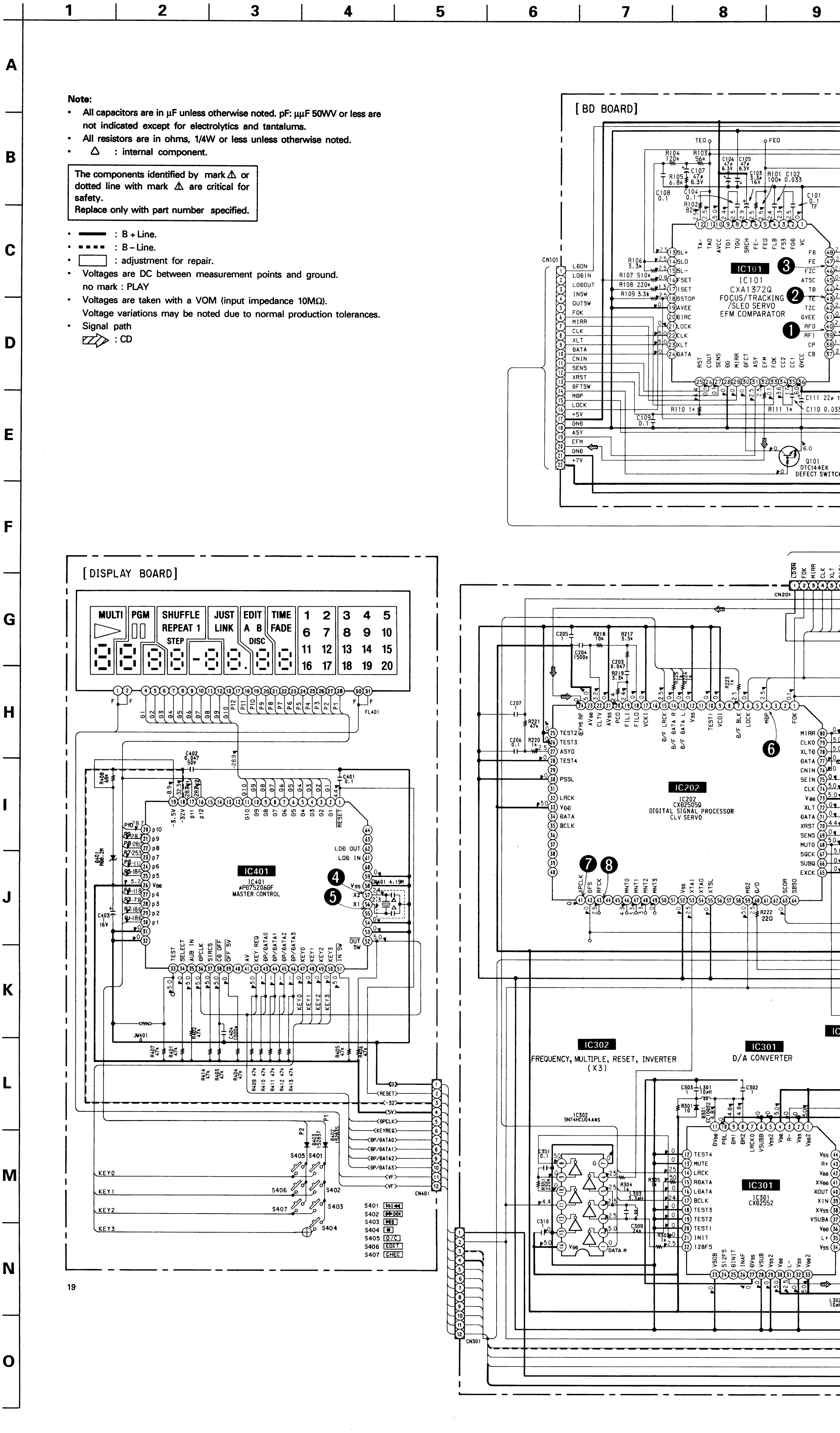
3-4. SCHEMATIC DIAGRAM

Note:

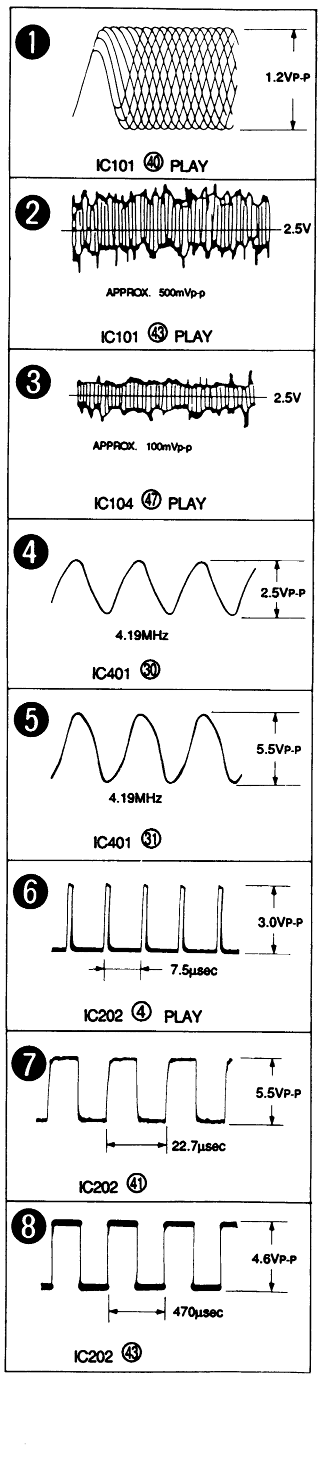
- All capacitors are in µF unless otherwise noted. pF: µµF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, 1/4W or less unless otherwise noted.
- △ : internal component.

> The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
> Replace only with part number specified.

- ▬ : B + Line.
- ▪▪▪▪ : B – Line.
- ☐ : adjustment for repair.
- Voltages are DC between measurement points and ground. no mark : PLAY
- Voltages are taken with a VOM (input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path ⇨ : CD


1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
[BD BOARD]
IC101
CXA1372Q
FOCUS/TRACKING
/SLED SERVO
EFM COMPARATOR
CN101
Q101
DTC144EK
DEFECT SWITCH
[DISPLAY BOARD]
MULTI
PGM
SHUFFLE
REPEAT 1
STEP
JUST
LINK
EDIT
A B
DISC
TIME
FADE
FL401
IC401
µPD75206GF
MASTER CONTROL
CN401
S401 ⏮⏪
S402 ⏭⏩
S403 ▶II
S404 ■
S405 O/C
S406 EDIT
S407 CHECK
19
IC202
CXD2505Q
DIGITAL SIGNAL PROCESSOR
CLV SERVO
CN201
IC302
FREQUENCY, MULTIPLE, RESET, INVERTER
(X3)
SN74HCU04ANS
IC301
D/A CONVERTER
CXD2552
CN301

● Waveforms



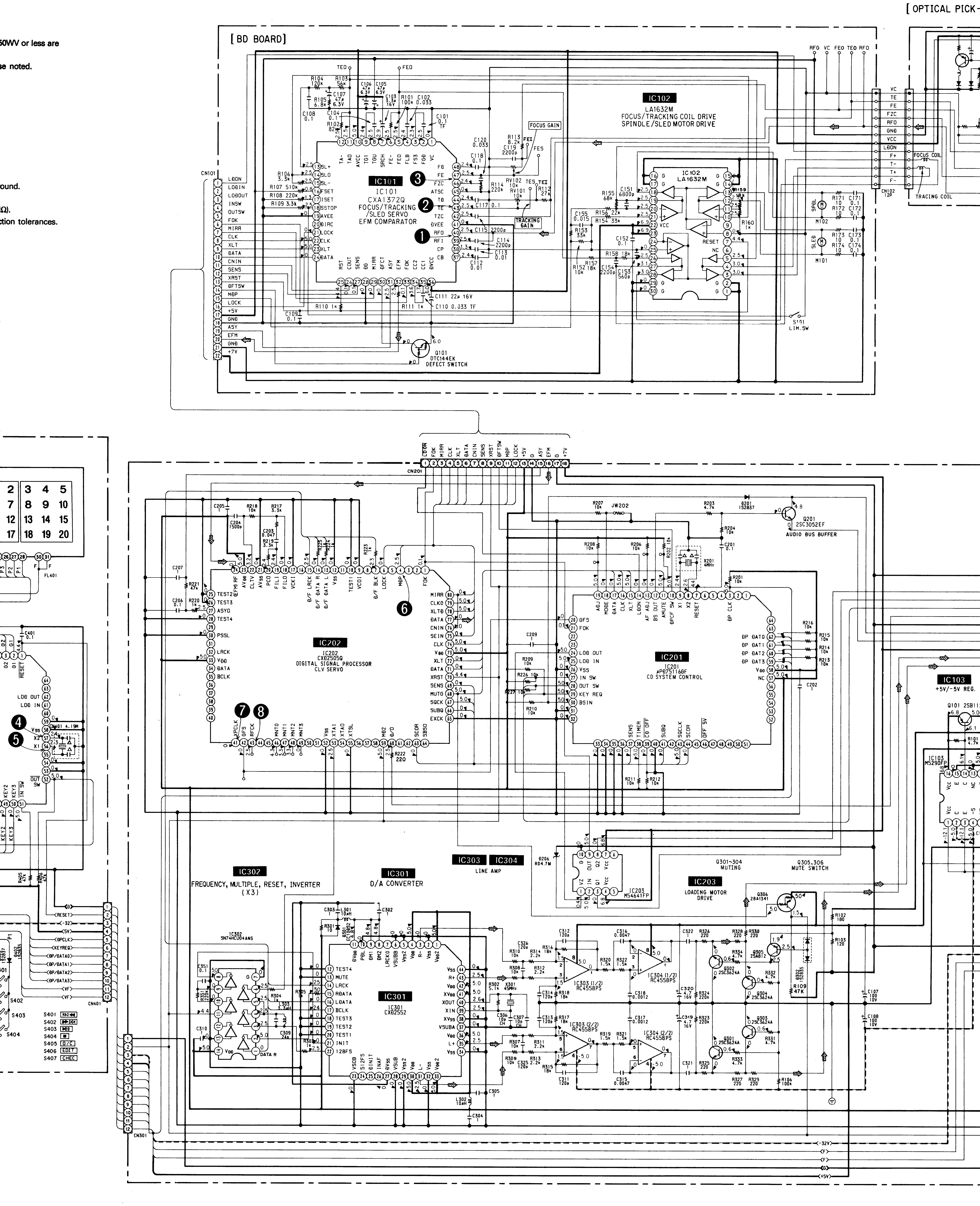
50WV or less are

se noted.

ound.

Ω).

ction tolerances.


[OPTICAL PICK-
[BD BOARD]
IC102
LA1632M
FOCUS/TRACKING COIL DRIVE
SPINDLE/SLED MOTOR DRIVE
IC101
CXA1372Q
FOCUS/TRACKING /SLED SERVO EFM COMPARATOR
FOCUS GAIN
TRACKING GAIN
Q101 DTC144EK DEFECT SWITCH
CN101
CN102 12P
FOCUS COIL
TRACKING COIL
SPDL M102
SLED M101
S101 LIM.SW
RFG VC FEO TEO RFO
CN201
IC202
CXD2505Q
DIGITAL SIGNAL PROCESSOR
CLV SERVO
IC201
μPD75116GF
CD SYSTEM CONTROL
Q201 2SC3052EF
AUDIO BUS BUFFER
X201 4MHz
IC103
+5V/-5V REG.
Q101 2SB11
IC103 M5290FP
IC302
FREQUENCY, MULTIPLE, RESET, INVERTER (X3)
IC302 SN74HCU04ANS
IC301
D/A CONVERTER
IC301 CX8255Z
IC303 IC304
LINE AMP
IC303 (1/2) RC4558PS
IC303 (2/2) RC4558PS
IC304 (1/2) RC4558PS
IC304 (2/2) RC4558PS
IC203
LOADING MOTOR DRIVE
IC203 M54641FP
Q301~304 MUTING
Q305,306 MUTE SWITCH
Q306 2SA1341
Q305 2SA812
Q301 2SC3624A
Q302 2SC3624A
Q303 2SC3624A
Q304 2SC3624A
X301 45MHz
CN301
CN401
FL401
S401 S402 S403 S404 S405 S406 S407
S405 O/C
S406 EDIT
S407 CHEC
❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽

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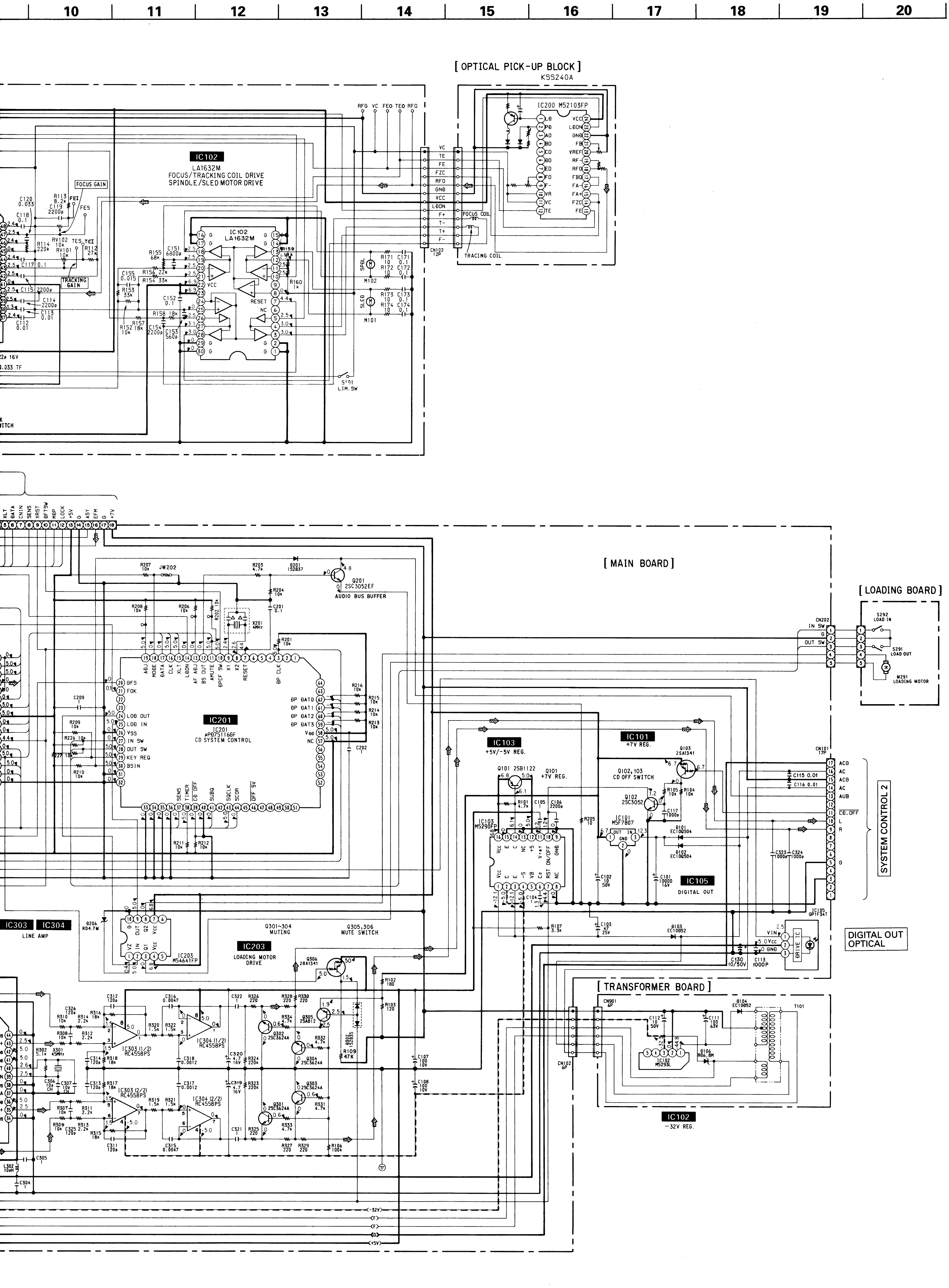
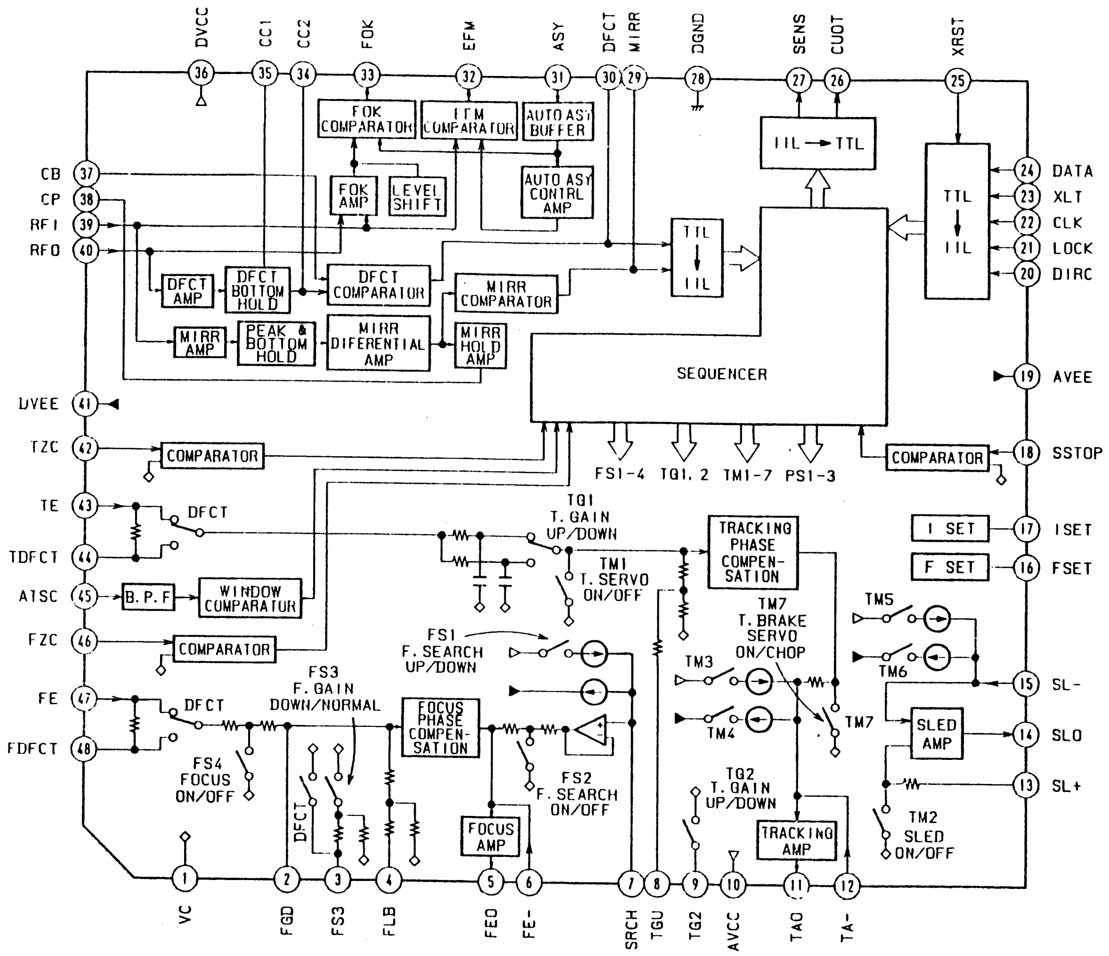
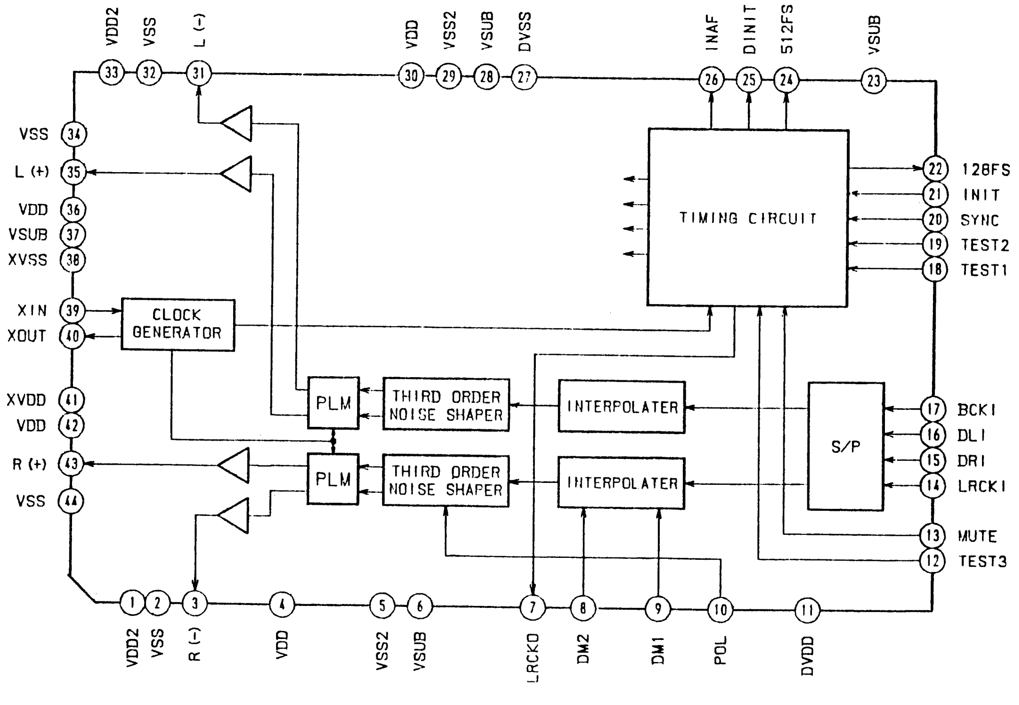

10
11
12
13
14
15
16
17
18
19
20
[OPTICAL PICK-UP BLOCK]
KSS240A
IC200 M52103FP
IC102
LA1632M
FOCUS/TRACKING COIL DRIVE
SPINDLE/SLED MOTOR DRIVE
FOCUS GAIN
TRACKING GAIN
IC102 LA1632M
RESET
FOCUS COIL
TRACING COIL
CN102 12P
SPDL M102
SLED M101
S101 LIM.SW
RFG VC FEO TEO RFO
VC TE FE FZC RFO GND VCC LDON F+ T- T+ F-
[MAIN BOARD]
[LOADING BOARD]
S292 LOAD IN
S291 LOAD OUT
M291 LOADING MOTOR
CN202
IN SW
G
OUT SW
Q201 2SC3052EF
AUDIO BUS BUFFER
X201 4MHz
JW202
IC201
IC201 µPD75116GF
CD SYSTEM CONTROL
IC103
+5V/-5V REG.
Q101 2SB1122
Q101 +7V REG.
IC103 M5290FP
IC101
+7V REG.
Q103 2SA1341
Q102,103 CD OFF SWITCH
Q102 2SC3052
IC101 M5F7807
D101 EC10Q504
D102 EC10Q504
IC105
DIGITAL OUT
CN101 17P
ACG AC ACG AC AUB CD.OFF L R G
SYSTEM CONTROL 2
IC105 GP1F34T
DRIVE IC
DIGITAL OUT OPTICAL
IC303 IC304
LINE AMP
IC203 M54641FP
Q301~304 MUTING
Q305,306 MUTE SWITCH
IC203
LOADING MOTOR DRIVE
Q306 2SA1341
Q305 2SA812
IC303 (1/2) RC4558PS
IC304 (1/2) RC4558PS
IC303 (2/2) RC4558PS
IC304 (2/2) RC4558PS
Q301 2SC3624A
Q302 2SC3624A
Q303 2SC3624A
Q304 2SC3624A
X301 45MHz
[TRANSFORMER BOARD]
CN901 6P
CN102 6P
IC102 M5293L
D104 EC10Q52
D106 RD6.8M
T101
IC102
-32V REG.
D103 EC10Q52
<-32V>
<F>
<F>
<G>
<+5V>

3-5. IC BLOCK DIAGRAMS

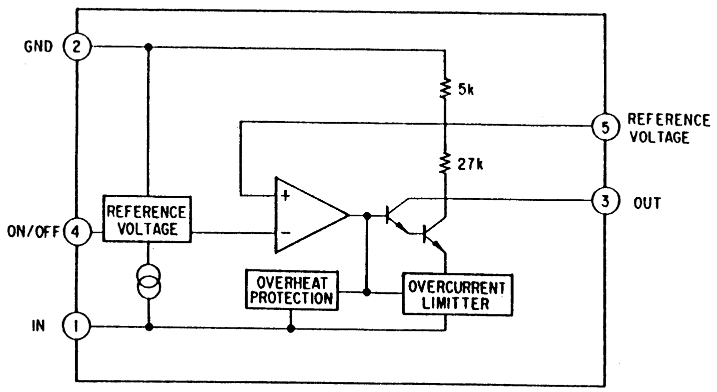
IC101 CXA1372Q


DVCC
CC1
CC2
FOK
EFM
ASY
DFCT
MIRR
DGND
SENS
CUOT
XRST
FOK COMPARATOR
EFM COMPARATOR
AUTO ASY BUFFER
FOK AMP
LEVEL SHIFT
AUTO ASY CONTRL AMP
IIL → TTL
TTL ↓ IIL
CB
CP
RFI
RFO
DFCT AMP
DFCT BOTTOM HOLD
DFCT COMPARATOR
MIRR COMPARATOR
MIRR AMP
PEAK & BOTTOM HOLD
MIRR DIFERENTIAL AMP
MIRR HOLD AMP
SEQUENCER
DATA
XLT
CLK
LOCK
DIRC
AVEE
DVEE
TZC
COMPARATOR
FS1-4 TG1, 2 TM1-7 PS1-3
SSTOP
TE
DFCT
TDFCT
ATSC
B.P.F
WINDOW COMPARATOR
FZC
TG1 T.GAIN UP/DOWN
TM1 T.SERVO ON/OFF
TRACKING PHASE COMPEN-SATION
I SET
F SET
ISET
FSET
TM7 T.BRAKE SERVO ON/CHOP
TM5
TM6
FS1 F.SEARCH UP/DOWN
FS3 F.GAIN DOWN/NORMAL
TM3
TM4
FE
FDFCT
FOCUS PHASE COMPEN-SATION
FS4 FOCUS ON/OFF
FS2 F.SEARCH ON/OFF
TG2 T.GAIN UP/DOWN
SLED AMP
SL-
SLO
SL+
FOCUS AMP
TRACKING AMP
TM2 SLED ON/OFF
VC
FGD
FS3
FLB
FEO
FE-
SRCH
TGU
TG2
AVCC
TAO
TA-

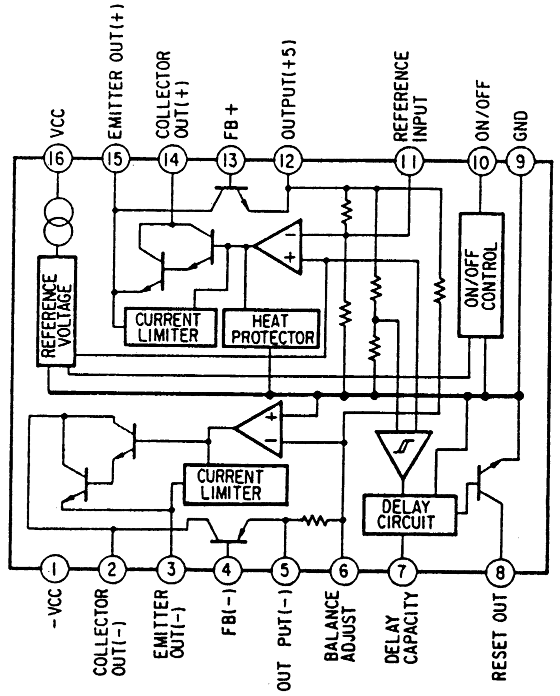
IC301 CXD2552Q


VDD2
VSS
L (-)
VDD
VSS2
VSUB
DVSS
INAF
DINIT
512FS
VSUB
VSS
L (+)
VDD
VSUB
XVSS
TIMING CIRCUIT
128FS
INIT
SYNC
TEST2
TEST1
XIN
XOUT
CLOCK GENERATOR
XVDD
VDD
R (+)
VSS
PLM
THIRD ORDER NOISE SHAPER
INTERPOLATER
S/P
BCKI
DLI
DRI
LRCKI
MUTE
TEST3
VDD2
VSS
R (-)
VDD
VSS2
VSUB
LRCKO
DM2
DM1
POL
DVDD

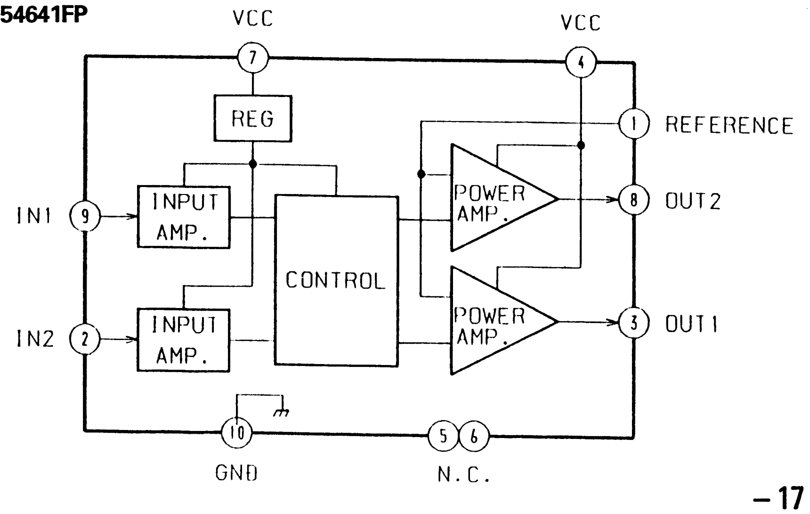
IC102 M5293L


GND
5k
27k
REFERENCE VOLTAGE
OUT
ON/OFF
REFERENCE VOLTAGE
OVERHEAT PROTECTION
OVERCURRENT LIMITTER
IN

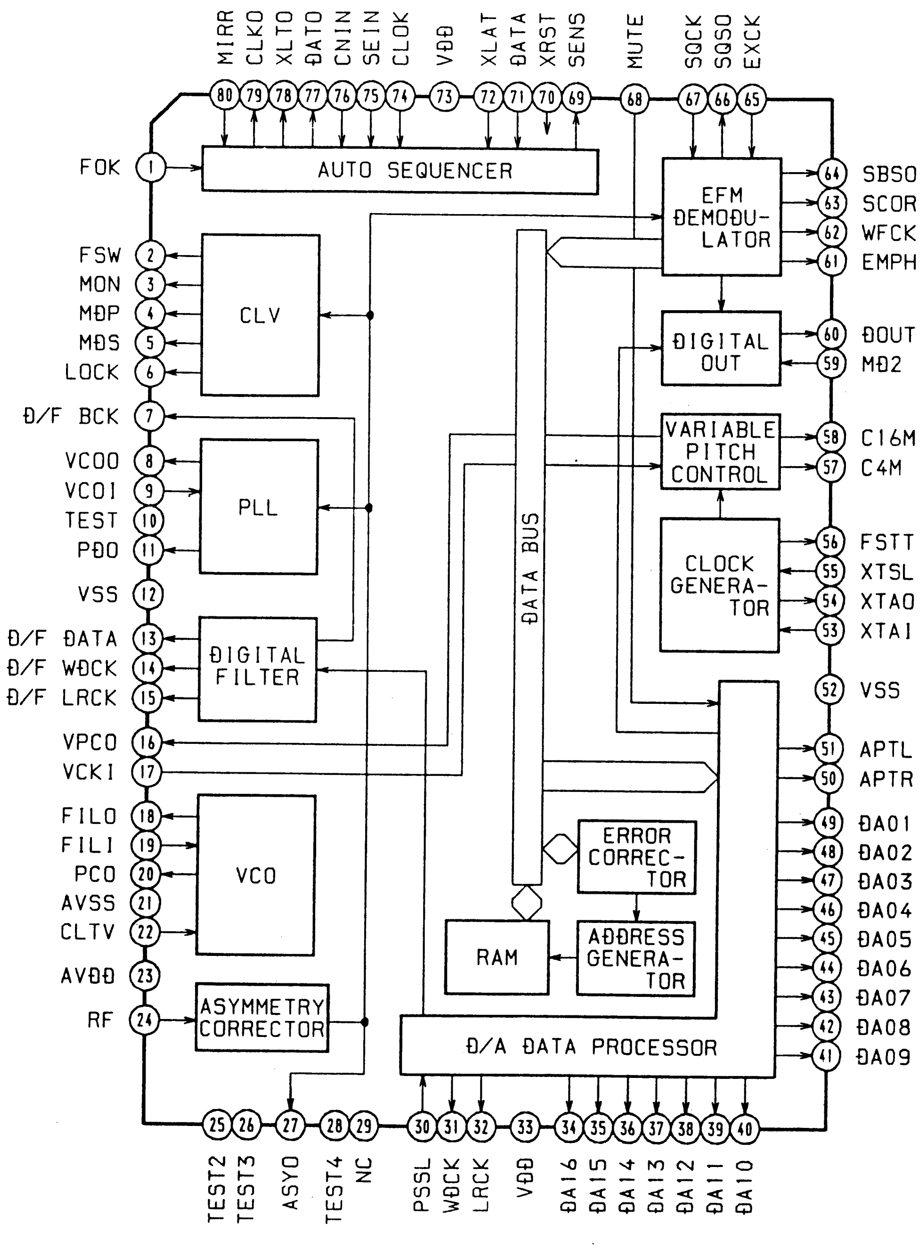
IC103 M5290FP


VCC
EMITTER OUT(+)
COLLECTOR OUT(+)
FB+
OUTPUT(+5)
REFERENCE INPUT
ON/OFF
GND
REFERENCE VOLTAGE
CURRENT LIMITER
HEAT PROTECTOR
ON/OFF CONTROL
CURRENT LIMITER
DELAY CIRCUIT
-VCC
COLLECTOR OUT(-)
EMITTER OUT(-)
FBI-)
OUT PUT(-)
BALANCE ADJUST
DELAY CAPACITY
RESET OUT

IC203 M54641FP


VCC
VCC
REG
REFERENCE
IN1
INPUT AMP.
POWER AMP.
OUT2
CONTROL
IN2
INPUT AMP.
POWER AMP.
OUT1
GND
N.C.

IC202 CXD2505Q


MIRR
CLKO
XLTO
DATO
CNIN
SEIN
CLOK
VDD
XLAT
DATA
XRST
SENS
MUTE
SQCK
SQSO
EXCK
FOK
AUTO SEQUENCER
EFM DEMODU-LATOR
SBSO
SCOR
WFCK
EMPH
FSW
MON
MDP
MDS
LOCK
CLV
DIGITAL OUT
DOUT
MD2
D/F BCK
VCOO
VCOI
TEST
PDO
VSS
PLL
VARIABLE PITCH CONTROL
C16M
C4M
CLOCK GENERA-TOR
FSTT
XTSL
XTAO
XTAI
DATA BUS
D/F DATA
D/F WDCK
D/F LRCK
DIGITAL FILTER
VSS
VPCO
VCKI
APTL
APTR
FILO
FILI
PCO
AVSS
CLTV
AVDD
RF
VCO
ERROR CORREC-TOR
RAM
ADDRESS GENERA-TOR
ASYMMETRY CORRECTOR
D/A DATA PROCESSOR
DA01
DA02
DA03
DA04
DA05
DA06
DA07
DA08
DA09
TEST2
TEST3
ASYO
TEST4
NC
PSSL
WDCK
LRCK
VDD
DA16
DA15
DA14
DA13
DA12
DA11
DA10

3-6. PIN FUNCTION OF IC202 AND IC401

- **IC202 CD System Controller (µPD75116GF-760-3BE)**

Functions effected by the captioned controller include IC101 (RF signal processing, servo), IC201 (DSP, digital filter) and loading control in the CD unit, data exchange with IC401 (display controller), audio bus entry, etc.

Pin No.	Pin Name	I/O	Description
1-2		O	Not in use with the model (open).
3	DPCLK	O	Display data transfer clock output to IC401 (display micon)
4-6		O	Not in use with the model (open)
7	$\overline{\text{RESET}}$	I	System reset input. "L": Reset
8	X2	I	Clock input
9	X1	I	Clock input (4 MHz)
10	DFCT SW	O	DEFECT circuit ON/OFF switching output of IC101 (CXA1372Q). It is turned OFF ("H") to focus-search the DISC flaw detection circuit.
11	AMUTE	O	Muting control output. "H": Mute
12	BSOUT	O	Audio bus output
13	AFADJ	I	Test mode input. Various test operations are effected upon "L" after turning ON the POWER.
14	LDON	O	Optical pickup laser diode ON/OFF switching output. "H": ON
15	XLT	O	Serial data latch output to IC201 (CXD2505Q)
16	CLK	O	Serial data transfer clock output to IC201 (CXD2505Q)
17	DATA	O	Serial data output to IC201 (CXD2505Q)
18	MODE	I	Not in use with the model (GND)
19	ADJ	I	Test mode input. Upon "L," GFS checking is disabled while continuously rotating the spindle no matter whether frame synch is issued during PLAY, PAUSE or SEARCH.
20	GFS	I	GFS signal input from IC201 (CXD2505Q). "L": NG "H": OK
21	FOK	I	Focus OK signal input from IC101 (CXA1372Q). "H": OK
22 - 23		O	Not in use with the model (open)
24	LODOUT	O	Output to rotate M291 (loading motor) in the loading out direction. *1
25	LODIN	O	Output to rotate M291 (loading motor) in the loading in direction. *1
26	Vss	–	Power terminal (GND)
27	$\overline{\text{IN SW}}$	I	S292 (Loading in switch) input
28	$\overline{\text{OUT SW}}$	I	S291 (Loading out switch) input
29	KEY REQ	I	Key data request input from IC401 (display controller)
30	BS IN	I	Audio bus input
31 - 36			Not in use with the model (GND)
37	SENS	I	SENS input from IC101 (CXA1372Q) and IC201 (CXD2505Q)
38	$\overline{\text{TIMER}}$	I	Not in use with the model (pull up)
39	D/F 16BIT	I	IC201 (CXD2505Q) digital filter mode setting input. It is fixed at 16 bit, 4fs with the model (pull up).
40		I	Not in use with the model (GND)
41	SUBQ	I	Subcode Q data input from IC201 (CXD2505Q)
42		O	Not in use with the model (open)
43	SQCLK	O	Subcode Q data readout clock output to IC201 (CXD2505Q)
44	SCOR	I	Subcode sync S0 + S1 detection input from IC201 (CXD2505Q)
45 - 56		O	Not in use with the model (open)
57	N.C.	I	Not in use with the model (+5V)
58	VDD	–	Power terminal (+5V)
59 - 62	DPDATA3-0	I/O	Key data input and display data output with IC401 (display controller)
63 - 64		O	Not in use with the model (open)

*1 Loading motor control

	IN	OUT	BRAKE
LODOUT ㉔	L	H	H
LODIN ㉕	H	L	H

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- **IC401 Display controller (μPD75206GF-716-3BE)**

In charge of displaying the FL tube and keying in, it exchanges data with the IC202 (CD syscon) in 4-bit parallel mode.

Pin No.	Pin Name	I/O	Description
1	$\overline{\text{RESET}}$	I	System reset input. "L": Reset
2 - 11	G1-10	O	Digital output to the FL tube
12 - 15		O	Not in use with the model (open)
16, 17	l, k	O	FL tube segment output
18	VLOAD	–	Power supply for the FL tube controller (builtin) (-32V)
19	VPRE	–	Power supply for the FL tube predriver (-3.5V)
20 - 25	j ~ e	O	FL tube segment output
26	VDD	–	Power terminal (+5V)
27, 28	d, c	O	FL tube segment output
29, 30	b, a	O	FL tube segment, key scan output
31, 32		I	Not in use with the model (GND)
33	$\overline{\text{TEST}}$	I	Test mode input. "L": Test mode
34	SELECT	I	Not in use with the model (pull up)
35	BSIN	I	Not in use with the model (pull up)
36	DPCLK	I	Display data transfer clock input from IC202 (CD syscon)
37, 38		I	Not in use with the model (pull up)
39		O	Not in use with the model (pull up)
40, 41		O	Not in use with the model (open)
42	KEY REQ	O	Key data request output to IC202 (CD syscon)
43 - 46	DPDATA0-3	I/O	Key data output and display data input with IC202 (CD syscon)
47 - 50	KEY0-3	I	Key data input
51, 52		I	Not in use with the model (pull up)
53, 54		I	Not in use with the model (GND)
55		O	Not in use with the model (open)
56	X1	I	System clock input (4.19 MHz)
57	X2	I	System clock input
58	Vss	–	Power supply terminal (GND)
59		I	Not in use with the model (GND)
60 - 64		O	Not in use with the model (open)

SECTION 4

EXPLODED VIEW

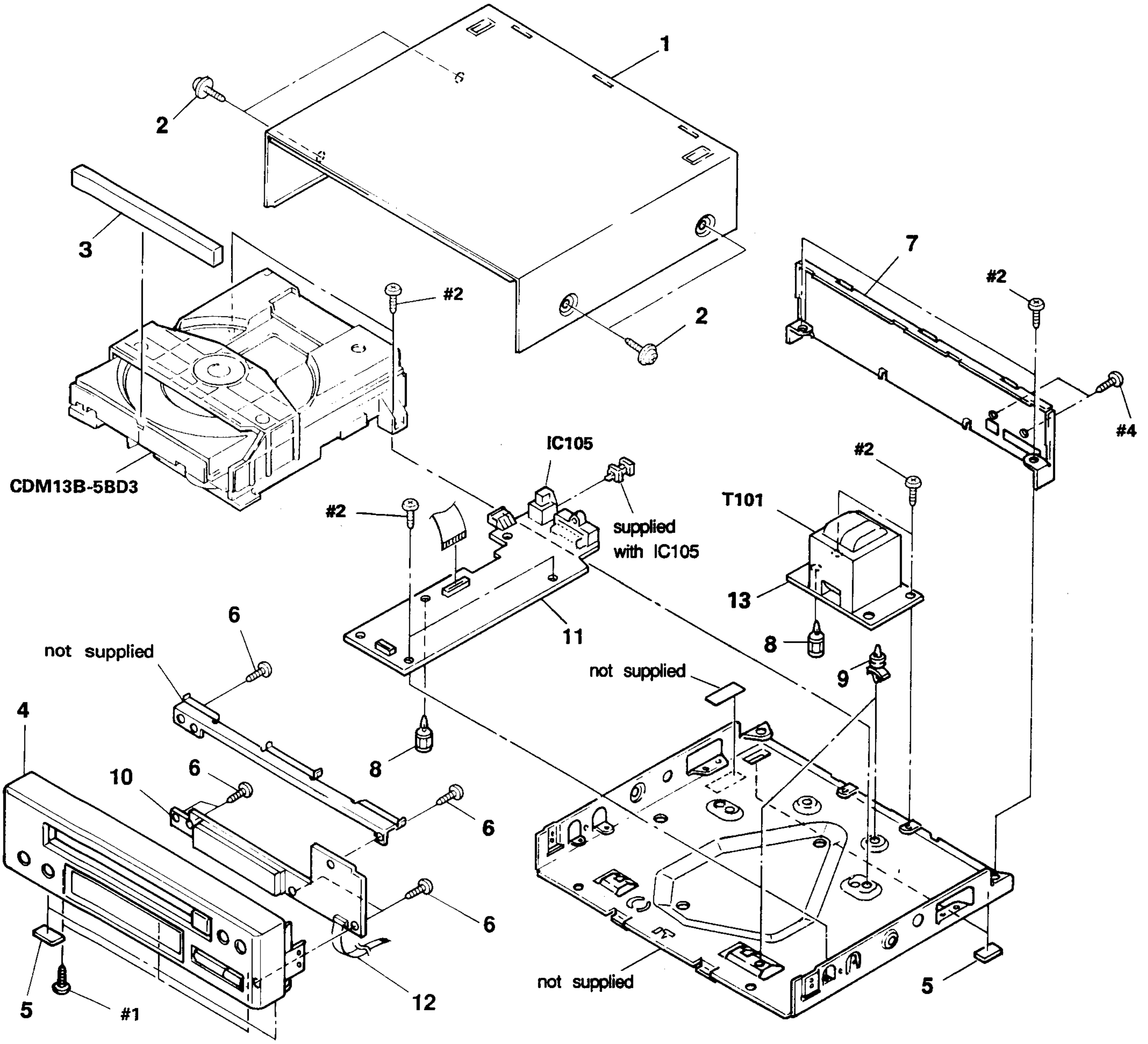
NOTE:

- –XX, –X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB,BALANCE(WHITE)...(RED)
  ↑ ↑
  Parts color Cabinet's color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware(# mark) list is given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

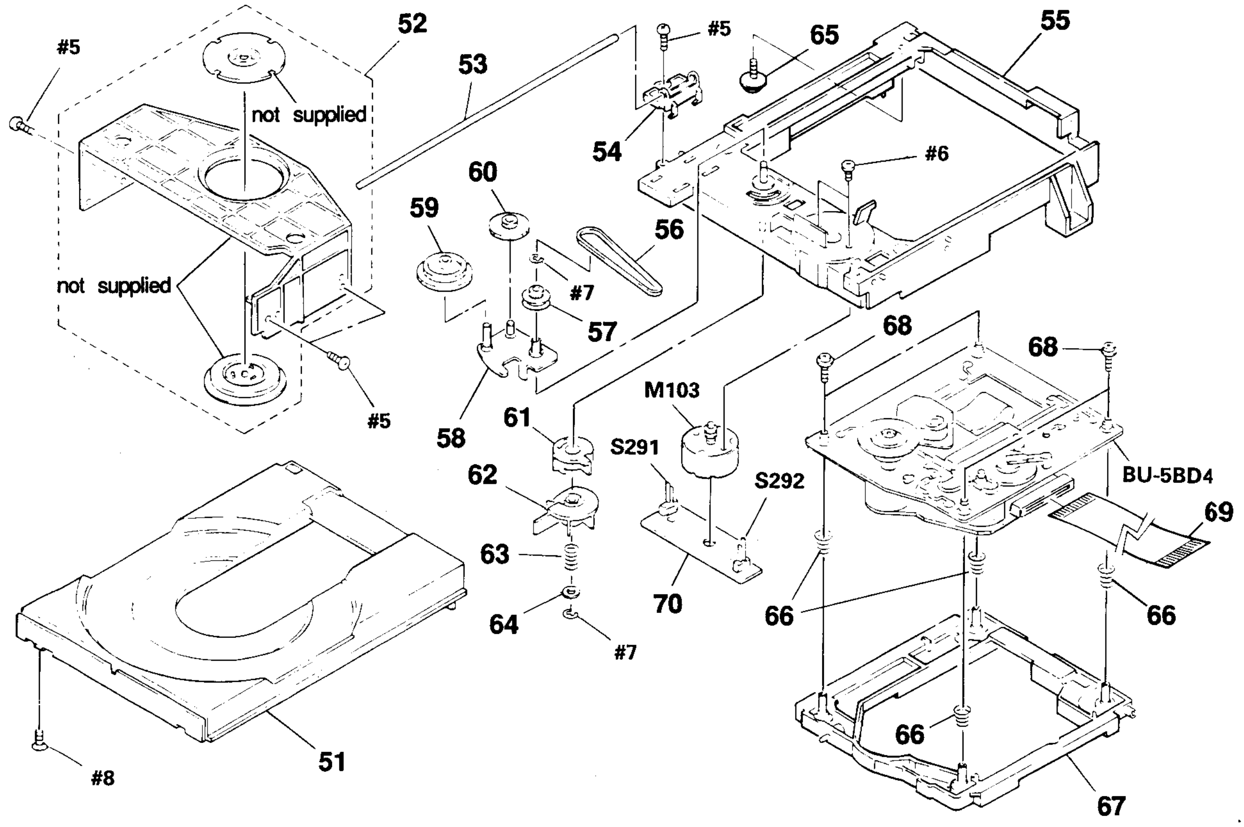
When indicating parts by reference number, please include the board name.

(1) CHASSIS SECTION



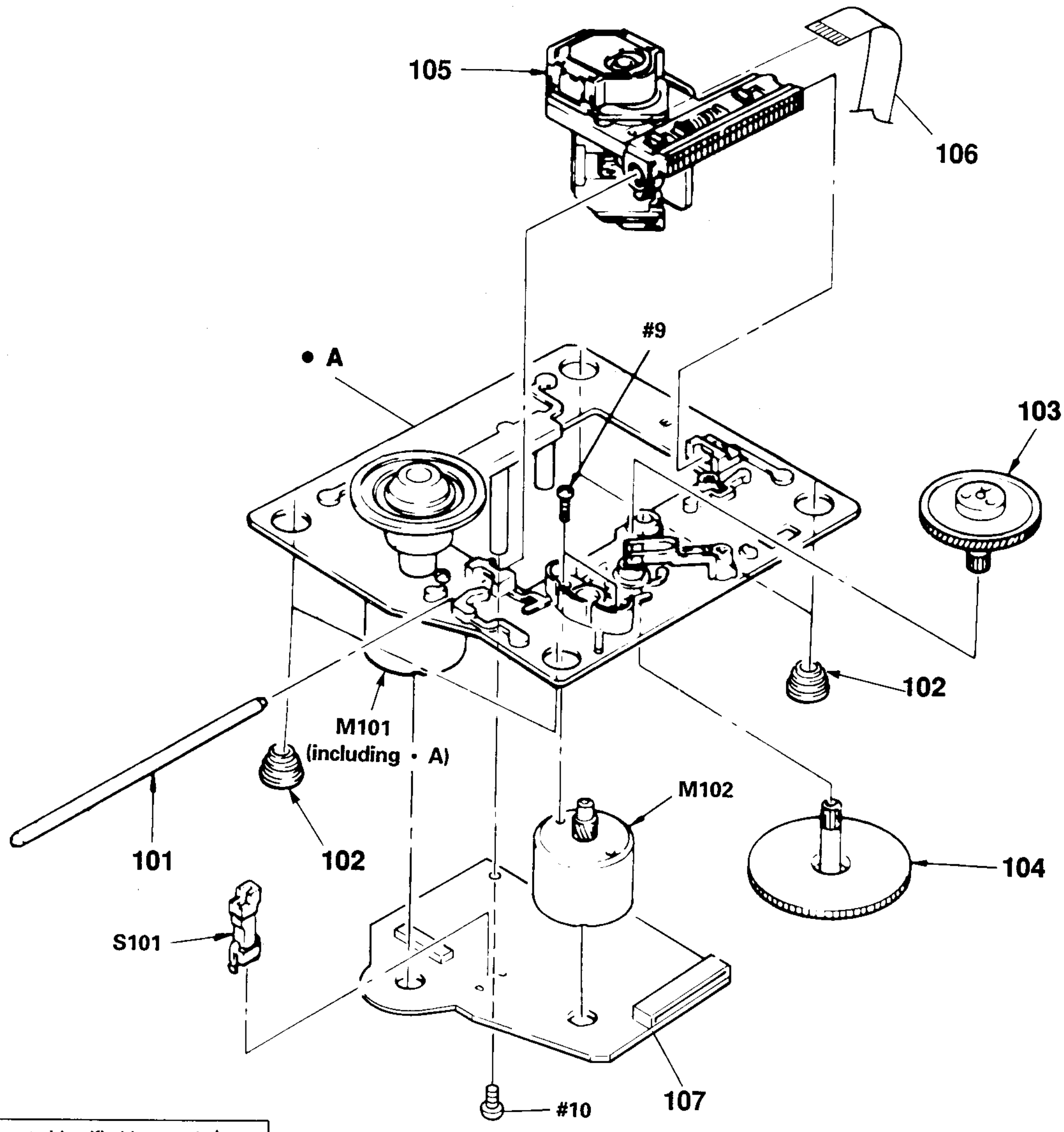
Ref. No.	Part No.	Description	Remarks
1	* 4-944-423-01	CASE (K206522)	
2	3-363-099-01	SCREW (CASE +3X8 TP2)	
3	4-944-417-01	PANEL, LOADING	
4	X-4941-522-1	PANEL ASSY, FRONT	
5	4-930-336-01	FOOT (FELT)	
6	4-928-635-01	SCREW, +BV (2.6X8) TAPPING	
7	* 4-943-175-41	PAENL, BACK	
8	* 3-669-610-00	SPACER	
9	* 4-924-098-11	HOLDER, PC BOARD	
10	* A-4617-811-A	DISPLAY BOARD, COMPLETE	
11	* A-4617-805-A	MAIN BOARD, COMPLETE	
12	1-575-001-11	WIRE, FILM TYPE (12 CORE)	
13	* 1-638-269-11	TRANSFORMER BOARD	
T101	⚠ 1-450-341-11	TRANSFORMER, POWER	

(2) CD MECHANISM SECTION (CDM13B-5BD3)


#5
52
53
#5
65
55
not supplied
54
#6
60
59
56
not supplied
#7
57
68
68
#5
M103
58
61
S291
BU-5BD4
62
S292
69
63
70
66
66
64
#7
66
#8
51
67

Ref. No.	Part No.	Description	Remarks
51	4-944-012-01	TABLE, DISC	
52	A-4604-752-A	HOLDER (MG) ASSY	
53	4-929-764-01	SHAFT (TABLE GUIDE)	
54	4-944-006-01	BEARING	
55	X-4941-462-1	CHASSIS (MD) ASSY	
56	4-927-649-01	BELT	
57	4-929-724-01	PULLEY (B)	
58	X-4929-703-1	ARM ASSY, SWING	
59	4-927-620-11	GEAR (P)	
60	4-927-628-01	GEAR (C)	
61	4-929-727-01	CAM (A)	
62	4-929-729-01	CAM (B)	
63	3-659-338-00	SPRING, COMPRESSION	
64	4-927-654-01	WASHER (LIMITER)	
65	* 4-917-583-21	BRACKET, YOKE	
66	4-917-541-01	SPRING (B)	
67	4-929-747-01	HOLDER (BU)	
68	4-933-134-01	SCREW (+PTPWH M2.6X6)	
69	1-535-845-11	JUMPER, FILM (WITH TERMINAL)	
70	* 1-634-461-11	LOADING BOARD	
M103	A-4608-362-A	MOTOR (L) ASSY (LOADING)	
S291	1-571-924-11	SWITCH, LEAF (LOAD OUT)	
S292	1-571-924-11	SWITCH, LEAF (LOAD IN)	

(3) OPTICAL PICK-UP BLOCK (BU-5BD3)


105
106
#9
• A
103
102
M101
(including • A)
M102
101
102
104
S101
#10
107

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remarks
101	4-917-565-01	SHAFT, SLED	
102	4-933-126-01	INSULATOR (A)	
103	4-917-567-01	GEAR (M)	
104	4-917-564-01	GEAR (P), FLATNESS	
105	⚠ 8-848-144-11	DEVICE, OPTICAL KSS-240A	
106	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
107	* A-4617-371-A	BD BOARD, COMPLETE	
M101	X-4917-523-3	ASSY, MOTOR (SPINDLE)	
M102	X-4917-504-1	ASSY, MOTOR (SLED)	
S101	1-572-085-11	SWITCH, LEAF (LIMIT IN)	

SECTION 5
ELECTRICAL PARTS LIST

NOTE:

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE : Metal Oxide-film resistor
  F : nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : μ, for example:
  uA...: μA..., uPA...: μPA...,
  uPB...: μPB..., uPC...: μPC...,
  uPD...: μPD...
- CAPACITORS
  uF : μF
- COILS
  uH : μH

Ref. No.	Part No.	Description				Remarks
*	A-4617-371-A	BD BOARD, COMPLETE				
		******************				
		(CAPACITOR)				
C101	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C102	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V	
C103	1-126-163-11	ELECT	4.7uF	20%	50V	
C104	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C105	1-126-154-11	ELECT	47uF	20%	6.3V	
C106	1-126-154-11	ELECT	47uF	20%	6.3V	
C107	1-126-154-11	ELECT	47uF	20%	6.3V	
C108	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C109	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C110	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V	
C111	1-131-367-00	TANTALUM	22uF	10%	20V	
C112	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C113	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C114	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V	
C115	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V	
C117	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C118	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C119	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V	
C120	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V	
C151	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V	
C152	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C153	1-163-006-11	CERAMIC CHIP	560PF	10%	50V	
C154	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V	
C155	1-163-023-00	CERAMIC CHIP	0.015uF	5%	50V	
C171	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C172	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C173	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C174	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
		(CONNECTOR)				
CN101	1-568-796-11	SOCKET, CONNECTOR 22P				
CN102	1-568-795-11	SOCKET, CONNECTOR 12P				
		(IC)				
IC101	8-752-050-82	IC CXA1372Q				
IC102	8-759-822-36	IC LA6532M				
		(JACK)				
J101	1-216-295-00	METAL CHIP	0	5%	1/10W	
J102	1-216-295-00	METAL CHIP	0	5%	1/10W	
		(TRANSISTOR)				
Q101	8-729-901-01	TRANSISTOR DTC144EK				
		(RESISTOR)				
R101	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R102	1-216-095-00	METAL CHIP	82K	5%	1/10W	
R103	1-216-091-00	METAL CHIP	56K	5%	1/10W	
R104	1-216-099-00	METAL CHIP	120K	5%	1/10W	
R105	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R106	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R107	1-216-114-00	METAL GLAZE	510K	5%	1/10W	
R108	1-216-105-00	METAL CHIP	220K	5%	1/10W	
R109	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R110	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R111	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R112	1-216-083-00	METAL CHIP	27K	5%	1/10W	
R113	1-216-071-00	METAL CHIP	8.2K	5%	1/10W	
R114	1-216-105-00	METAL CHIP	220K	5%	1/10W	
R152	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R153	1-216-085-00	METAL CHIP	33K	5%	1/10W	

BD MAIN DISPLAY TRANSFORMER

Ref. No.	Part No.	Description			Remarks
R154	1-216-085-00	METAL CHIP	33K	5%	1/10W
R155	1-216-093-00	METAL CHIP	68K	5%	1/10W
R156	1-216-081-00	METAL CHIP	22K	5%	1/10W
R157	1-216-079-00	METAL CHIP	18K	5%	1/10W
R158	1-216-079-00	METAL CHIP	18K	5%	1/10W
R159	1-216-079-00	METAL CHIP	18K	5%	1/10W
R160	1-216-049-00	METAL CHIP	1K	5%	1/10W
R171	1-216-001-00	METAL CHIP	10	5%	1/10W
R172	1-216-001-00	METAL CHIP	10	5%	1/10W
R173	1-216-001-00	METAL CHIP	10	5%	1/10W
R174	1-216-001-00	METAL CHIP	10	5%	1/10W

(VARIABLE RESISTOR)

Ref. No.	Part No.	Description
RV101	1-238-016-11	RES, ADJ, CARBON 10K
RV102	1-238-016-11	RES, ADJ, CARBON 10K

(SWITCH)

Ref. No.	Part No.	Description
S101	1-572-085-11	SWITCH, LEAF (LIMIT IN)

`*************************************************************`

* A-4617-805-A MAIN BOARD, COMPLETE

`***********************`

* A-4617-811-A DISPLAY BOARD, COMPLETE

`***********************`

* 1-638-269-11 TRANSFORMER BOARD

`***********************`

* 4-880-403-11 HEAT SINK

* 4-932-810-11 CUSHION (FL)

(CAPACITOR)

Ref. No.	Part No.	Description			Remarks
C101	1-126-939-11	ELECT	10000uF	20%	16V
C102	1-124-907-11	ELECT	10uF	20%	50V
C103	1-124-477-11	ELECT	47uF	20%	25V
C104	1-164-346-11	CERAMIC CHIP	1uF		16V
C105	1-164-346-11	CERAMIC CHIP	1uF		16V
C106	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C107	1-124-443-00	ELECT	100uF	20%	10V
C108	1-124-443-00	ELECT	100uF	20%	10V
C111	1-126-063-11	ELECT	100uF	20%	63V
C112	1-124-907-11	ELECT	10uF	20%	50V
C113	1-164-346-11	CERAMIC CHIP	1uF		16V
C115	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C116	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C117	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C201	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C202	1-164-346-11	CERAMIC CHIP	1uF		16V
C203	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C204	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C205	1-164-346-11	CERAMIC CHIP	1uF		16V
C206	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C207	1-164-346-11	CERAMIC CHIP	1uF		16V
C209	1-164-346-11	CERAMIC CHIP	1uF		16V
C302	1-164-346-11	CERAMIC CHIP	1uF		16V
C303	1-164-346-11	CERAMIC CHIP	1uF		16V
C304	1-164-346-11	CERAMIC CHIP	1uF		16V
C305	1-164-346-11	CERAMIC CHIP	1uF		16V
C306	1-163-227-11	CERAMIC CHIP	10PF	5%	50V
C307	1-163-227-11	CERAMIC CHIP	10PF	5%	50V
C309	1-163-102-00	CERAMIC CHIP	24PF	5%	50V
C310	1-164-346-11	CERAMIC CHIP	1uF		16V
C311	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C312	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C313	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C314	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C315	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C316	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C317	1-163-010-11	CERAMIC CHIP	0.0012uF	10%	50V
C318	1-163-010-11	CERAMIC CHIP	0.0012uF	10%	50V
C319	1-164-346-11	CERAMIC CHIP	1uF		16V
C320	1-164-346-11	CERAMIC CHIP	1uF		16V
C321	1-164-346-11	CERAMIC CHIP	1uF		16V
C322	1-164-346-11	CERAMIC CHIP	1uF		16V
C323	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C324	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C325	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C326	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C351	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C401	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C402	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C403	1-164-346-11	CERAMIC CHIP	1uF		16V
C404	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V

(CONNECTOR)

Ref. No.	Part No.	Description
CN101	* 1-569-624-11	SOCKET, CONNECTOR 17P
CN102	1-568-662-11	CONNECTOR, BOARD TO BOARD 6P
CN201	1-568-802-11	SOCKET, CONNECTOR 19P
CN202	* 1-564-339-00	PIN, CONNECTOR 5P
CN203	* 1-564-340-00	PIN, CONNECTOR 6P
CN301	* 1-573-099-11	HOUSING, CONNECTOR 12P
CN401	* 1-573-098-11	HOUSING, CONNECTOR 12P
CN901	1-568-668-11	CONNECTOR, BOARD TO BOARD 6P

(DIODE)

Ref. No.	Part No.	Description
D101	8-719-210-39	DIODE EC10QS-04
D102	8-719-210-39	DIODE EC10QS-04
D103	8-719-210-33	DIODE EC10DS2
D104	8-719-210-33	DIODE EC10DS2
D106	8-719-106-17	DIODE RD6.8M-B2
D201	8-719-400-18	DIODE MA152WK

When indicating parts by reference number, please include the board name.

MAIN **DISPLAY** **TRANSFORMER**

Ref. No.	Part No.	Description	Remarks
D206	8-719-105-74	DIODE RD4.7M-B3	
D301	8-719-210-33	DIODE EC10DS2	
D302	8-719-104-34	DIODE 1S2836	
D401	8-719-106-36	DIODE RD8.2M-B3	
D402	8-719-104-34	DIODE 1S2836	
D403	8-719-400-18	DIODE MA152WK	
		(INDICATOR TUBE)	
FL401	1-519-652-11	INDICATOR TUBE, FLUORESCENT	
		(IC)	
IC101	8-759-604-86	IC M5F7807L	
IC102	8-759-633-42	IC M5293L	
IC103	8-759-636-24	IC M5290FP	
IC105	8-749-922-39	IC GP1F34T	
IC201	8-759-153-16	IC uPD75116GF-760-3BE	
IC202	8-752-340-37	IC CXD2505Q	
IC203	8-759-636-20	IC M54641FP	
IC301	8-752-334-87	IC CXD2552Q	
IC302	8-759-927-29	IC SN74HCU04ANS	
IC303	8-759-981-95	IC RC4558S	
IC304	8-759-981-95	IC RC4558S	
IC401	8-759-154-14	IC uPD75206GF-716-3BE	
		(JUMPER)	
JW201	1-216-295-00	METAL CHIP 0 5% 1/10W	
JW202	1-216-295-00	METAL CHIP 0 5% 1/10W	
JW401	1-216-295-00	METAL CHIP 0 5% 1/10W	
		(COIL)	
L301	1-410-381-11	INDUCTOR CHIP 10uH	
L302	1-410-381-11	INDUCTOR CHIP 10uH	
L303	1-410-375-11	INDUCTOR CHIP 3.3uH	
		(TRANSISTOR)	
Q101	8-729-804-41	TRANSISTOR 2SB1122-S	
Q102	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q103	8-729-805-69	TRANSISTOR 2SA1341	
Q201	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q301	8-729-107-46	TRANSISTOR 2SC3624A-L15	
Q302	8-729-107-46	TRANSISTOR 2SC3624A-L15	
Q303	8-729-107-46	TRANSISTOR 2SC3624A-L15	
Q304	8-729-107-46	TRANSISTOR 2SC3624A-L15	
Q305	8-729-216-22	TRANSISTOR 2SA1162-G	
Q306	8-729-805-69	TRANSISTOR 2SA1341	
		(RESISTOR)	
R101	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R102	1-216-031-00	METAL CHIP 180 5% 1/10W	
R103	1-216-027-00	METAL CHIP 120 5% 1/10W	
R104	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R105	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R106	1-216-097-00	METAL CHIP 100K 5% 1/10W	
R107	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R109	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R201	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R202	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R203	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R204	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R205	1-216-001-00	METAL CHIP 10 5% 1/10W	
R206	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R207	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R208	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R209	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R210	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R211	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R212	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R213	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R214	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R215	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R216	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R217	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R218	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R219	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R220	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R221	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R222	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R223	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R224	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R225	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R226	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R227	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R301	1-216-001-00	METAL CHIP 10 5% 1/10W	
R302	1-216-066-00	METAL CHIP 5.1K 5% 1/10W	
R303	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R304	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R305	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R307	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R308	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R309	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R310	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R311	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R312	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R313	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R314	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R315	1-216-079-00	METAL CHIP 18K 5% 1/10W	
R316	1-216-079-00	METAL CHIP 18K 5% 1/10W	

When indicating parts by reference number, please include the board name.

MAIN DISPLAY TRANSFORMER LOADING

Ref. No.	Part No.	Description				Remarks
R317	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R318	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R319	1-216-053-00	METAL CHIP	1.5K	5%	1/10W	
R320	1-216-053-00	METAL CHIP	1.5K	5%	1/10W	
R321	1-216-053-00	METAL CHIP	1.5K	5%	1/10W	
R322	1-216-053-00	METAL CHIP	1.5K	5%	1/10W	
R323	1-216-105-00	METAL CHIP	220K	5%	1/10W	
R324	1-216-105-00	METAL CHIP	220K	5%	1/10W	
R325	1-216-033-00	METAL CHIP	220	5%	1/10W	
R326	1-216-033-00	METAL CHIP	220	5%	1/10W	
R327	1-216-033-00	METAL CHIP	220	5%	1/10W	
R328	1-216-033-00	METAL CHIP	220	5%	1/10W	
R329	1-216-033-00	METAL CHIP	220	5%	1/10W	
R330	1-216-033-00	METAL CHIP	220	5%	1/10W	
R331	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R332	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R333	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R334	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R351	1-216-105-00	METAL CHIP	220K	5%	1/10W	
R401	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R402	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R403	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R404	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R405	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R406	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R407	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R408	1-216-093-00	METAL CHIP	68K	5%	1/10W	
R409	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R410	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R411	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R412	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R413	1-216-089-00	METAL CHIP	47K	5%	1/10W	
		(SWITCH)				
S401	1-572-184-11	SWITCH, KEYBOARD (|◁◁ ◀◀)				
S402	1-572-184-11	SWITCH, KEYBOARD (▶▶ ▷▷|)				
S403	1-572-184-11	SWITCH, KEYBOARD (▶II)				
S404	1-572-184-11	SWITCH, KEYBOARD (■)				
S405	1-572-184-11	SWITCH, KEYBOARD (OPEN/CLOSE)				
S406	1-572-184-11	SWITCH, KEYBOARD (EDIT)				
S407	1-572-184-11	SWITCH, KEYBOARD (CHECK)				
		(TRANSFORMER)				
T101	⚠ 1-450-341-11	TRANSFORMER, POWER				
		(CRYSTAL)				
X201	1-577-358-21	VIBRATOR, CERAMIC (4.0MHz)				
X301	1-577-686-11	VIBRATOR, CRYSTAL (45MHz)				
X401	1-577-359-21	VIBRATOR, CERAMIC (4.19MHz)				

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Ref. No.	Part No.	Description	Remarks
	* 1-634-461-11	LOADING BOARD *************	
		(CONNECTOR)	
CN291	* 1-564-498-11	PIN, CONNECTOR 5P	
		(SWITCH)	
S291	1-571-924-11	SWITCH, LEAF (LOADING OUT)	
S292	1-571-924-11	SWITCH, LEAF (LOADING IN)	

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MISCELLANEOUS
****

Ref. No.	Part No.	Description	Remarks
12	1-575-001-11	WIRE, FILM TYPE (12 CORE)	
69	1-535-845-11	JUMPER, FILM (WITH TERMINAL)	
105	⚠ 8-848-144-11	DEVICE, OPTICAL KSS-240A	
106	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
M101	X-4917-523-3	ASSY, MOTOR (SPINDLE)	
M102	X-4917-504-1	ASSY, MOTOR (SLED)	
M103	A-4608-362-A	MOTOR (L) ASSY (LOADING)	

****

ACCESSORY & PACKING MATERIAL
****

Ref. No.	Part No.	Description	Remarks
	4-920-941-01	SHEET (B), PROTECTION	
	* 4-941-548-01	LABEL, CLASS 1	
	* 4-945-079-01	CUSHION	

****

HARDWARE LIST

Ref. No.	Part No.	Description	Remarks
# 1	7-682-547-09	SCREW +BVTT 3X6 (S)	
# 2	7-682-547-04	SCREW +BVTT 3X6 (S)	
# 3	7-685-135-19	SCREW +BTP 2.6X10 TYPE2 N-S	
# 4	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
# 5	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
# 6	7-621-775-10	SCREW +B 2.6X4	
# 7	7-624-105-04	STOP RING 2.3, TYPE -E	
# 8	7-685-234-19	SCREW +KTP 2.6X8 TYPE2NON-SLIT	
# 9	7-621-255-15	SCREW +P 2X3	
#10	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S	
#11	7-682-548-04	SCREW +BVTT 3X8 (S)	

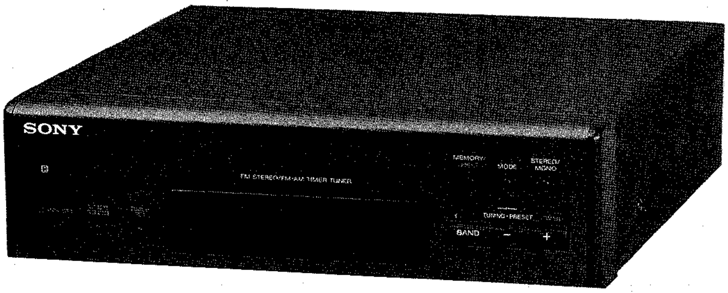
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

ST-H3600/H6600

SERVICE MANUAL

AEP Model
UK Model



ST-H3600 and ST-H6600 are the tuner section in MHC-2600/3600 and MHC-5600/6600 respectively.

Photo : ST-H6600

SPECIFICATIONS

System	FM stereo, FM/AM superheterodyne tuner
FM tuner section	
Tuning range	87.5 — 108 MHz
Antenna terminals	75 ohm unbalanced
Intermediate frequency	10.7 MHz
AM tuner section	
Tuning range	For AEP, UK models MW: 531 — 1,602 kHz LW: 153 — 279 kHz For Italian model MW: 522 — 1,611 kHz LW: 144 — 288 kHz
Antenna	AM loop antenna. External antenna terminals
Intermediate frequency	450 kHz

Note :
G : Germany model
IT : Italian model

TABLE OF CONTENTS

Section Title Page

1. SERVICING NOTES 3
2. GENERAL
   - Parts Identification 5
   - Clock Setting 6
   - Radio 6
3. ELECTRICAL ADJUSTMENTS 8
4. DIAGRAMS
   - 4-1. Block Diagram 10
   - 4-2. Semiconductor Lead Layouts 13
   - 4-3. Printing Wiring Board - tuner section - 14
   - 4-4. Schematic diagram - tuner section - 17
   - 4-5. Printing Wiring Board - display section - 19
   - 4-6. Schematic diagram - display section - 21
   - 4-7. IC Block Diagrams 22
   - 4-8. Pin Function of IC701 System Controller 24
5. EXPLODED VIEWS
   - Chassis Section 25
6. ELECTRICAL PARTS LIST 26

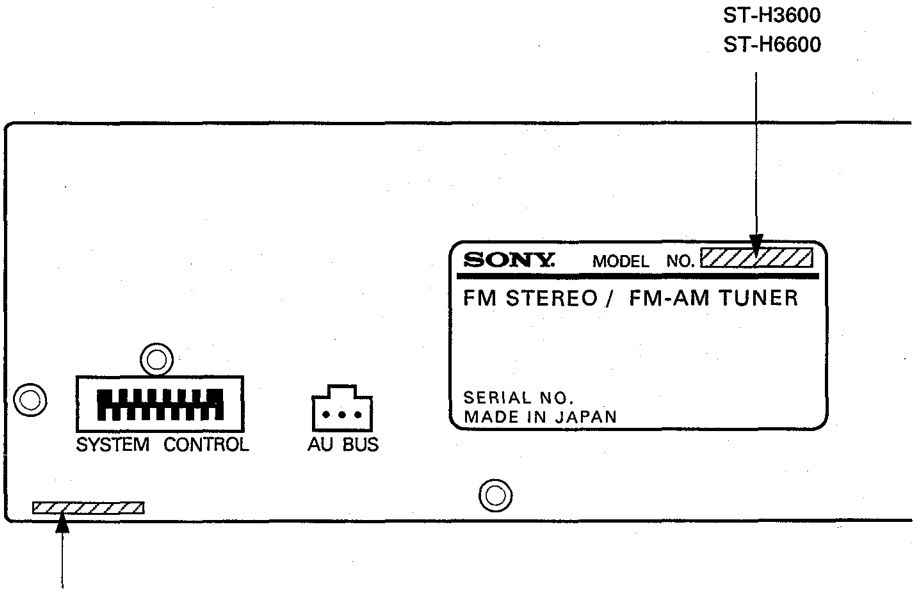
MICROFILM

FM STEREO/FM-AM TUNER

SONY®

MODEL IDENTIFICATION

– BACK PANEL –


ST-H3600
ST-H6600
SONY
MODEL NO.
FM STEREO / FM-AM TUNER
SERIAL NO.
MADE IN JAPAN
SYSTEM CONTROL
AU BUS

4-942-893-51. AE ....ST-H3600 AEP,UK model
4-942-893-81. AE4 ....ST-H3600 G model
4-942-893-91. IT ....ST-H3600 IT model

4-942-893-01. AE ....ST-H6600 AEP model
4-942-893-31. AE4 ....ST-H6600 G model
4-942-893-41. IT ....ST-H6600 IT model

SECTION 1
SERVICING NOTES

SUPPLY OF POWER DURING SERVICES

Because the equipment is not provided with any power supply, it is operated with power supplied from the amplifier TA-H2600, H3600, H5600 or H6600 used in the series. The equipment requires the following 4 types of voltages. Therefore, connect the equipment to TA-H2600, H3600, H5600 or H6600 for services such as repairing with power supplied, because it will be too complicated to supply these voltages individually.

VOLTAGE	MAJOR CIRCUIT IN USE
AC 3.9V	FL tube filament voltage (VF)
DC -24V	Display controller IC701 grid voltage (VG)
DC 5.6V	Display controller IC701, Tuner PLL IC81 Vcc
DC 12V	Tuner RF, FM/AM DET IC21 Vcc

SERVICE MODE TO CHECK TIMER ON-OFF

It is possible to check whether the timer normally functions while being connected with an amplifier.

(1) Connect the equipment to the amplifier TA-H2600, H3600, H5600 or H6600 and set the POWER switch to STANDBY state.

(2) Set the time of the tuner to any time.

(3) Press 3 switches "BAND","-" and "MEMORY/NEXT" at the same time (while pressing "BAND" and "-" beforehand, finally press "MEMORY/NEXT")

(4) FL display tube

10 : 21
↓ 0.5 sec
10 : 22
↓ 0.5 sec
10 : 23
↓ 0.5 sec
10 : 24
↓ 0.5 sec
FUNCTION : TUNER
BAND : FM
FREQUENCY : Preset memory 1 → POWER ON
↓ 3 sec
00 : 00 → POWER OFF

(5) Completion

Note : After completion of the checking above, data preset in the memory IC702 is erased while resetting the memory to the following state upon shipping from the works, so be sure to recover the same frequency as that before the repairing.

- **Frequencies initially preset**

	AEP/UK model			G/IT model		
	FM	MW	LW	FM	MW	LW
1	87.5MHz	531KHz	153KHz	87.5MHz	522KHz	144KHz
2	88.0MHz	603KHz	162KHz	88.0MHz	603KHz	162KHz
3	98.0MHz	999KHz	216KHz	98.0MHz	999KHz	216KHz
4	100.0MHz	1404KHz	270KHz	100.0MHz	1404KHz	270KHz
5	108.0MHz	1602KHz	279KHz	108.0MHz	1611KHz	288KHz
6 - 20	*1	*2	*2	*1	*2	*2

*1 The same frequency values are set for the preset memory No.6 - No.10, No.11 - No.15 and No.16 - No.20 as for No.1 - No.5 respectively.

*2 The same frequency values are set for the preset menory No.6 -No.10 as for No.1 - No.5.

SERVICE MODE TO CHECK FL TUBE AND KEY INPUT

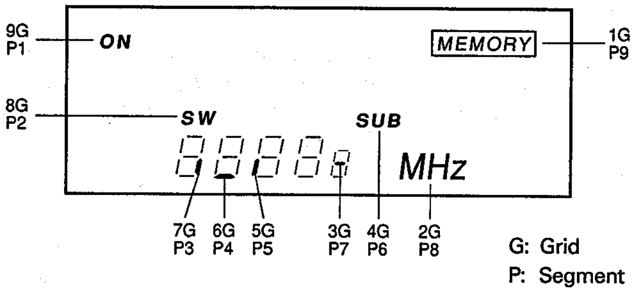
It is possible to check FL tube all ON grid, segment and key input.

(1) Connect the equipment to the amplifier TA-H2600, H3600, H5600 or H6600 and remove the AC cord of the amplifier out of the AC receptacle.

(2) While pressing 3 switches "BAND","-" and "MEMORY/NEXT" at the same time, insert the AC cord of the amplifier into the receptacle.

(3) Thus, all FL display tubes light up. By pressing "+" or "TIMER CONTROL" in this state, partial lighting or key input checking, respectively, is effected.

Partial lighting: Indicates the mode to check complete connection between the grid and segment of the FL tube. The condition is normal when the following indication is effected. By pressing "+" or "-" in the partial lighting mode, the status returns to key input checking or all ON in (3), respectively.



Key input checking: Shows the mode to check key input into 9 keys on the front panel. "0" is indicated at first and, every time a different key is pressed, indicated number is increased. After completion of pressing all 9 keys, "PASS" is indicated. (Once a key is pressed, pressing it again is rejected.)

(4) After the completion of the checking, the equipment recovers normal operation by once removing the AC cord and inserting it again into the AC receptacle.

HOW TO FORCEFULLY TURN POWER ON

The equipment is not provided with any power switch. Therefore, power ON/OFF is controlled in the amplifier side. However, even without an amplifier, power is supplyable to the equipment according to the following methods provided any type of power is available, e.g. using a special jig or supplying the 4 types of voltages individually.

(When power is supplied from the amplifier, power is turned ON only for the tuner.)

(1) Supply power.

(2) Press 3 switches "STEREO/MONO","-" and "MEMORY/NEXT" at the same time.
(Press "STEREO/MONO" and "-" beforehand, and finally press "MEMORY/NEXT.")

However, when the equipment is started up by the methods above, service modes TIMER ON/OFF and FL tube and key input checking are not operable.

SECTION 2
GENERAL

This section is extracted from instruction manual.

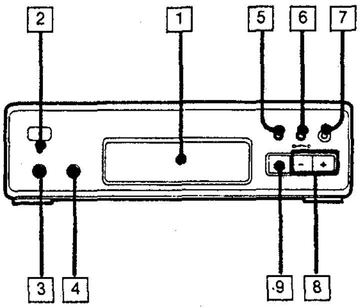
Parts Identification

Refer to the pages indicated in ● for use of the buttons.

Tuner Section A

- 1 Display window
- 2 CLOCK SET button ㉔
- 3 TIMER SELECT button (112)
- 4 TIMER SET button (112)
- 5 MEMORY/NEXT button ㉔ (60) (112)
- 6 MODE button (58) (62)
- 7 STEREO/MONO (stereo/monaural) button
- 8 TUNING PRESET/TIMER –/+ buttons
- 9 BAND selector (58)

A



Clock Setting

Setting the Clock

Example: Set to 9:25 in the morning.

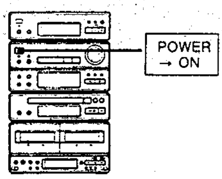
1. **Press CLOCK SET.**
2. **Set the hour with the – or + button.**
3. **Press MEMORY/NEXT.**
4. **Set the minute with the – or + button.**
5. **Press MEMORY/NEXT.**
   The clock starts operating.

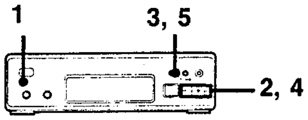
Information on the time

The European and U.K. model shows the time in 24-hour cycle.
The model for other countries shows the time in 12-hour cycle.
AM 12:00 = midnight
PM 12:00 = noon

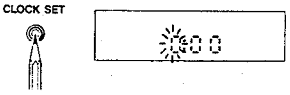
When a power interruption occurs
If the power is recovered within several hours, there is no need to reset the clock, timer, and Wake Up Volume settings. If the power interruption is long, all the above settings are erased, and "0:00" ("AM 12:00") will flash on the display.

To change the frequency display to the time display
Press CLOCK DISP. on the remote commander. Press it again to change to the frequency display.

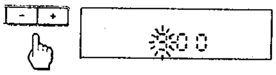




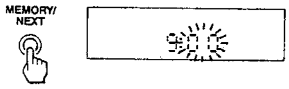
1



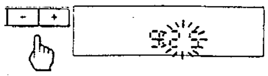
2



3



4



5

MEMORY/
NEXT

Radio

The automatic tuning allows you to receive stations whose signal is strong enough. When the signal is too weak, use the manual tuning.

Tuning in Automatically

1. **Press BAND repeatedly until the desired band appears.**
   As you press BAND, the band changes as follows:
   European and U.K. model:
   FM → MW → LW
   Model for other countries:
   FM → SW → MW
2. **Press MODE so that the TUNING indicator lights up.**
3. **Keep – or + depressed for more than 1 second.**
   "AUTO" appears on the display and the unit tunes in a station automatically.

Repeat step 3 until the desired station appears.

Tuning in Manually

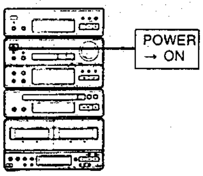
1. **Press BAND repeatedly until the desired band appears.**
2. **Press MODE so that the TUNING indicator lights up.**
3. **Press – or + repeatedly until the desired station appears.**

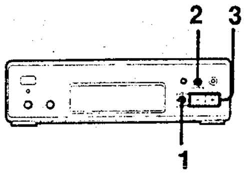
Indicator on the display

TUNED: Appears when a station of sufficient signal strength is tuned in.
STEREO: Appears when an FM stereo program of sufficient signal strength is received.

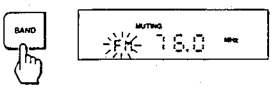
Antenna adjustment A

For MW and LW (SW) reception, find the best location for the supplied AM loop antenna.

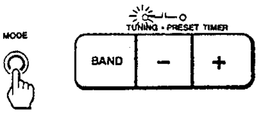




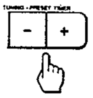
1



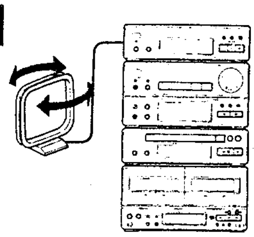
2



3



A



Radio

Storing Stations

You can store up to 20 FM stations and 10 MW stations and 10 LW (SW) stations in a desired sequence, so that you can tune in the stored station directly by entering the preset station number.
This operation is not possible with the remote commander.

1 **Tune in the desired station.**

2 **Press MEMORY/NEXT.**
"MEMORY" and the preset station numbers appear on the display.

3 **While "MEMORY" is on (for several seconds), press – or + to select a desired preset number.**

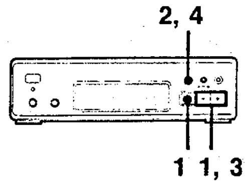
4 **Press MEMORY/NEXT.**
"MEMORY" disappears, and the station is stored.

Repeat step 1 to 4 for each station to be stored.

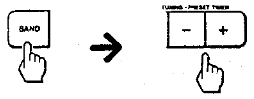
If you cannot store a station successfully
Press MEMORY/NEXT again so that "MEMORY" appears, and then proceed with steps 3 and 4 above.
Be sure to operate while "MEMORY" is on (about 4 seconds).

When you have selected the wrong preset station number
Press MEMORY/NEXT again and then proceed with the steps 3 and 4.

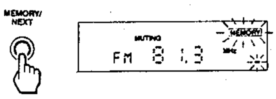
To change the preset station
Store a desired station at the desired preset number by proceeding with the above steps.
The station previously preset will be erased.
Erasing only is not possible.



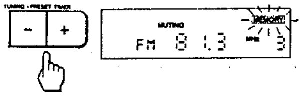
1


BAND
TUNING · PRESET TIMER
–
+

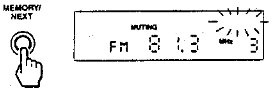
2


MEMORY/NEXT
MUTING
MEMORY
FM 81.3
MHz

3


TUNING · PRESET TIMER
–
+
MUTING
MEMORY
FM 81.3
MHz
3

4


MEMORY/NEXT
MUTING
FM 81.3
MHz
3

Radio

To Tune in a Preset Station

Notes:

- When you use the remote commander for the following operations make sure that the display of the remote commander shows "TUNER" If not, press TUNER on the remote commander.
- You cannot operate the buttons on the lid if the lid is open.

1 **Press BAND to select a desired band.**

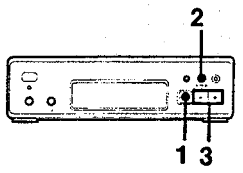
2 **Press MODE so that the PRESET indicator lights up.**

3 **Press – or + (◀ or ▶ on the remote commander) to select the desired preset station number.**

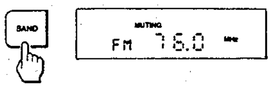
To tune in a preset station directly

Possible only with the remote commander.

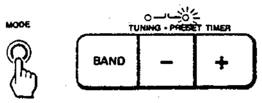
1 Press BAND to select a desired band.
2 Press the numeric buttons to select the desired preset station number.



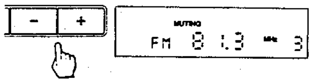
1


BAND
MUTING
FM 76.0
MHz

2


MODE
TUNING · PRESET TIMER
BAND
–
+

3


–
+
MUTING
FM 81.3
MHz
3

SECTION 3

ELECTRICAL ADJUSTMENTS

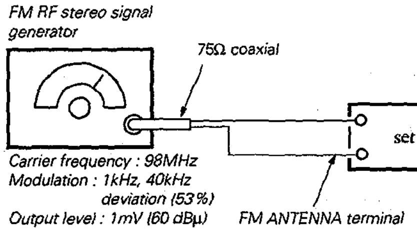
PRECAUTIONS IN REPAIRING

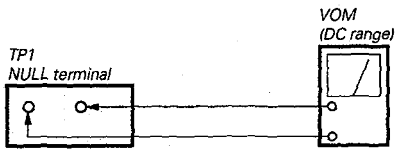
If the front end unit fails, it is difficult to repair the inner circuits, so replace the entire front end unit.

FM SECTION

FM DISCRIMINATOR ALIGNMENT (NULL CHECK)

Setting :


FM RF stereo signal generator
75Ω coaxial
set
Carrier frequency : 98MHz
Modulation : 1kHz, 40kHz deviation (53%)
Output level : 1mV (60 dBμ)
FM ANTENNA terminal


VOM (DC range)
TP1
NULL terminal

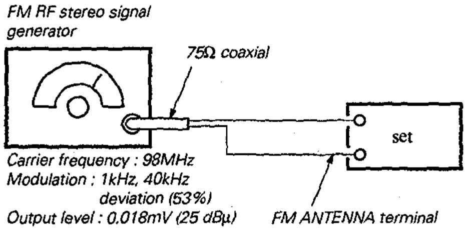
Procedure :

1. Tune the set to 98MHz.
2. Adjust T21 for 0V reading on the VOM.

Note : FM TUNING LEVEL adjustment shoud be made after FM discriminator alignment.

FM TUNING LEVEL ADJUSTMENT

Setting :

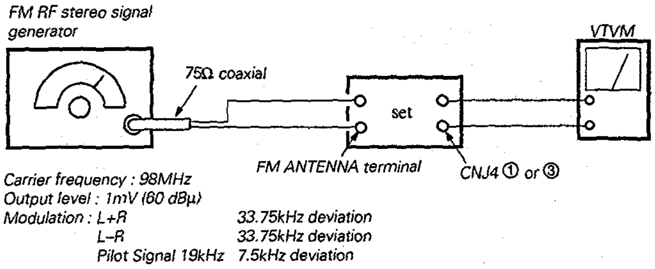

FM RF stereo signal generator
75Ω coaxial
set
Carrier frequency : 98MHz
Modulation : 1kHz, 40kHz deviation (53%)
Output level : 0.018mV (25 dBμ)
FM ANTENNA terminal

Procedure :

1. Tune the set to 98MHz.
2. Adjust T24 so that the TUNED LED goes on.

FM STEREO SEPARATION ADJUSTMENT

Setting :


FM RF stereo signal generator
75Ω coaxial
set
VTVM
FM ANTENNA terminal
CNJ4 ① or ③
Carrier frequency : 98MHz
Output level : 1mV (60 dBμ)
Modulation : L+R 33.75kHz deviation
L−R 33.75kHz deviation
Pilot Signal 19kHz 7.5kHz deviation

Procedure :
Tune the set to 98MHz.

FM stereo Signal generator Output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV21 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV21 for minimum reading.

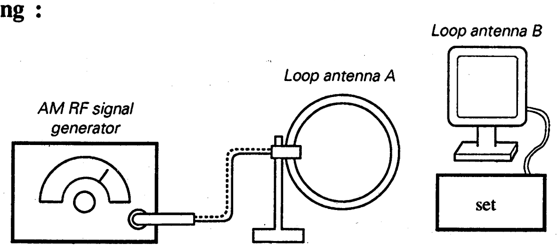
L-CH Stereo separation : Ⓐ – Ⓑ
R-CH Stereo separetion : Ⓒ – Ⓓ

The separations of both channels should be equal.

AM SECTION

AM TUNING LEVEL ADJUSTMENT

Setting :

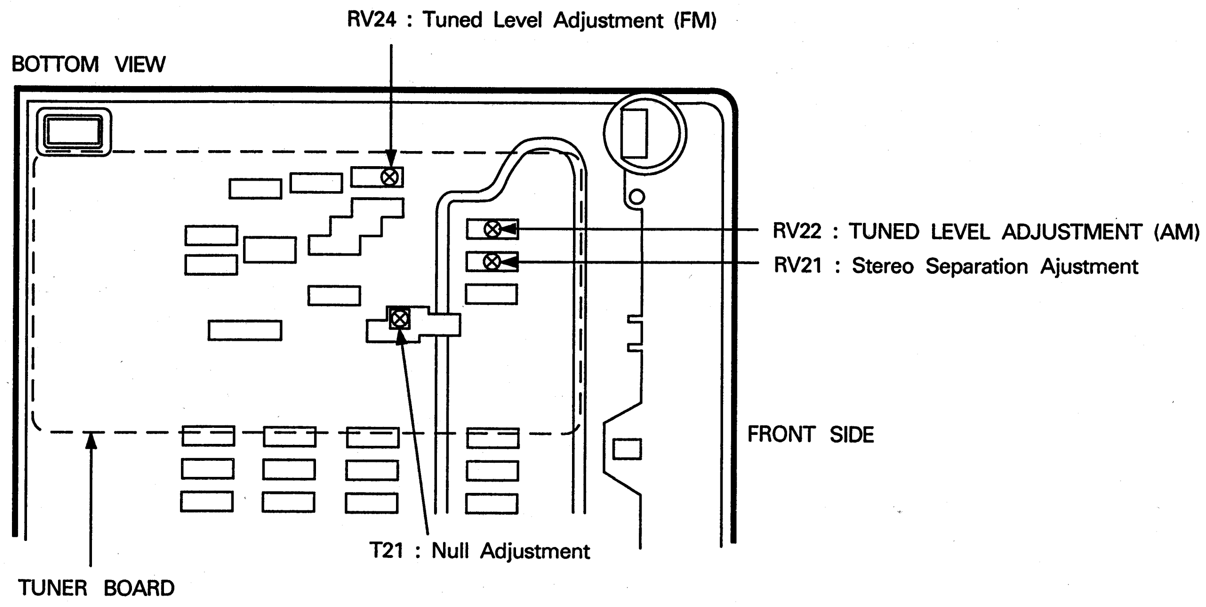

Loop antenna B
Loop antenna A
AM RF signal generator
set

Carrier frequency : 216kHz
30% amplitude
modulation by 400Hz signal

Procedure :

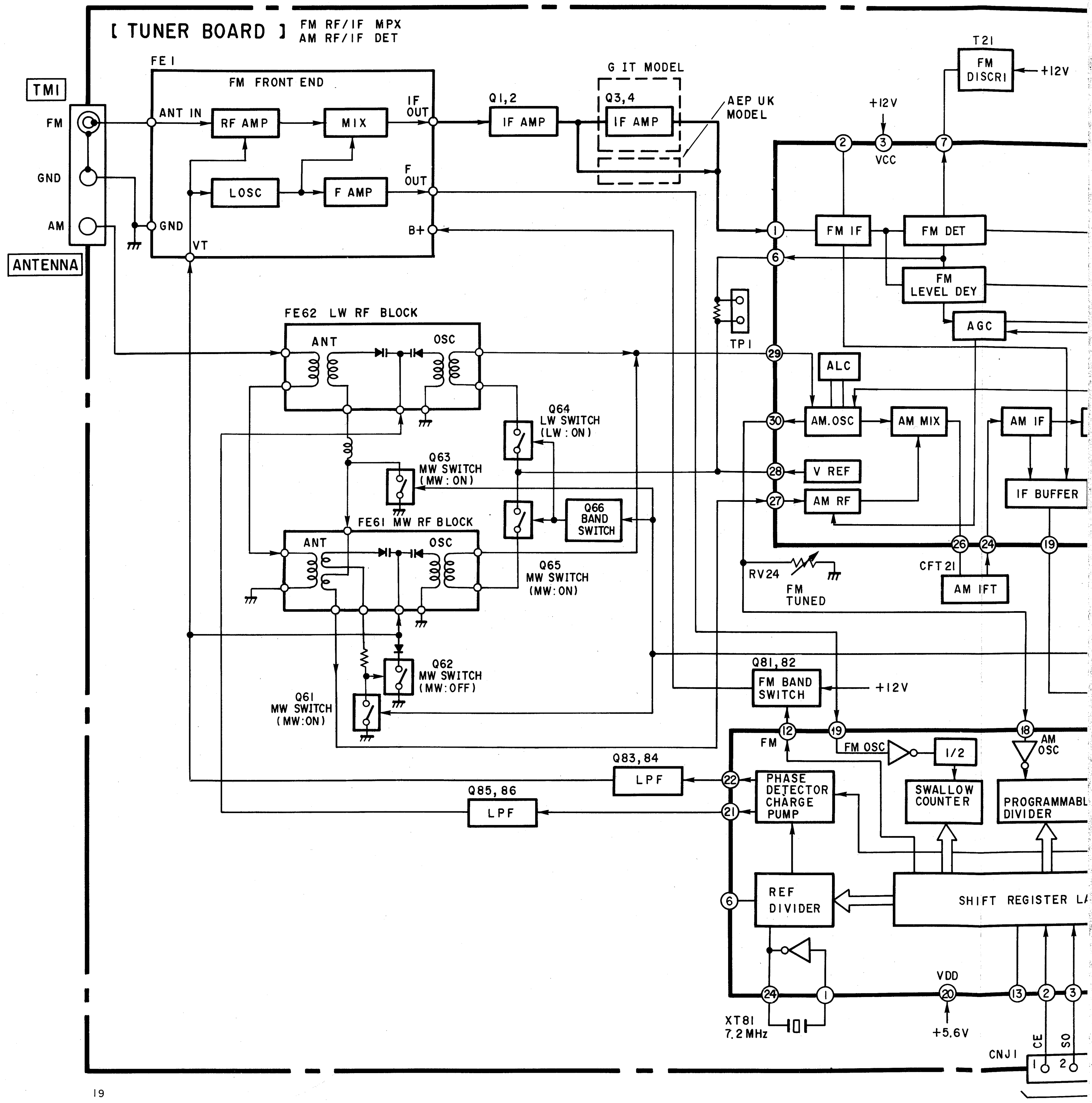
1. Set loop antenna A so that the loop antenna B input level becomes 2.5mV (68dB/m).
2. Tune the set to 216kHz.
3. Adjust the RV22 so that the TUNED LED goes on.

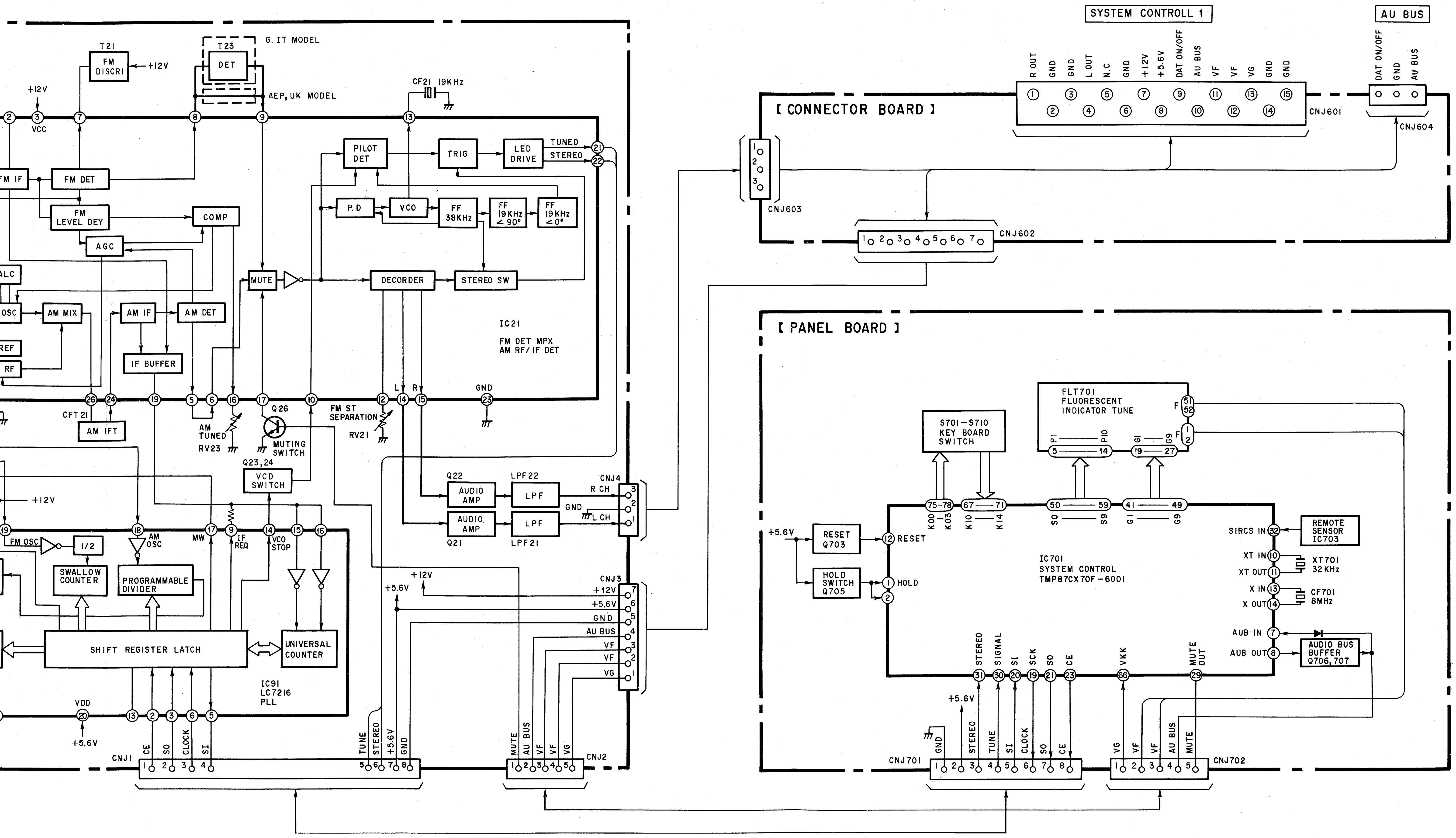
[PARTS ARRANGEMENT DIAGRAM FOR ADJUSTMENT]


RV24 : Tuned Level Adjustment (FM)
BOTTOM VIEW
RV22 : TUNED LEVEL ADJUSTMENT (AM)
RV21 : Stereo Separation Ajustment
FRONT SIDE
T21 : Null Adjustment
TUNER BOARD

SECTION 4
DIAGRAMS

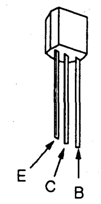
4-1. BLOCK DIAGRAM


[TUNER BOARD] FM RF/IF MPX AM RF/IF DET
TM1
FM
GND
AM
ANTENNA
FE1
FM FRONT END
ANT IN
RF AMP
MIX
IF OUT
LOSC
F AMP
F OUT
B+
GND
VT
Q1,2
IF AMP
G IT MODEL
Q3,4
IF AMP
AEP UK MODEL
T21
FM DISCRI
+12V
+12V
VCC
FM IF
FM DET
FM LEVEL DEY
AGC
TP1
FE62 LW RF BLOCK
ANT
OSC
ALC
AM.OSC
AM MIX
AM IF
V REF
AM RF
IF BUFFER
Q64
LW SWITCH
(LW : ON)
Q63
MW SWITCH
(MW : ON)
Q66
BAND SWITCH
FE61 MW RF BLOCK
ANT
OSC
Q65
MW SWITCH
(MW:ON)
RV24
FM TUNED
CFT21
AM IFT
Q62
MW SWITCH
(MW:OFF)
Q61
MW SWITCH
(MW:ON)
Q81,82
FM BAND SWITCH
+12V
FM
FM OSC
1/2
AM OSC
Q83,84
LPF
Q85,86
LPF
PHASE DETECTOR CHARGE PUMP
SWALLOW COUNTER
PROGRAMMABL DIVIDER
REF DIVIDER
SHIFT REGISTER L
VDD
XT81
7.2MHz
+5.6V
CNJ1
CE
SO
19

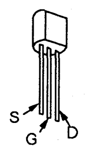

T21
FM DISCRI
+12V
T23
DET
G. IT MODEL
AEP, UK MODEL
+12V
VCC
CF21 19KHz
FM IF
FM DET
FM LEVEL DEY
COMP
AGC
PILOT DET
TRIG
LED DRIVE
TUNED
STEREO
P.D
VCO
FF 38KHz
FF 19KHz ∠90°
FF 19KHz ∠0°
ALC
OSC
AM MIX
AM IF
AM DET
REF
RF
IF BUFFER
MUTE
DECORDER
STEREO SW
IC21
FM DET MPX
AM RF/IF DET
CFT21
AM IFT
AM TUNED RV23
Q26
MUTING SWITCH
FM ST SEPARATION
RV21
L
R
GND
Q23,24
VCD SWITCH
Q22
AUDIO AMP
LPF22
LPF
CNJ4
R CH
GND
L CH
AUDIO AMP
Q21
LPF
LPF21
+12V
FM OSC
1/2
AM OSC
MW
IF REQ
VCO STOP
SWALLOW COUNTER
PROGRAMMABLE DIVIDER
SHIFT REGISTER LATCH
UNIVERSAL COUNTER
IC91
LC7216
PLL
VDD
+5.6V
+12V
+5.6V
CNJ3
+12V
+5.6V
GND
AU BUS
VF
VF
VG
CNJ1
CE
SO
CLOCK
SI
TUNE
STEREO
+5.6V
GND
MUTE
AU BUS
VF
VF
VG
CNJ2
SYSTEM CONTROLL 1
R OUT
GND
GND
L OUT
N.C
GND
+12V
+5.6V
DAT ON/OFF
AU BUS
VF
VF
VG
GND
GND
CNJ601
AU BUS
DAT ON/OFF
GND
AU BUS
CNJ604
[CONNECTOR BOARD]
CNJ603
CNJ602
[PANEL BOARD]
FLT701
FLUORESCENT INDICATOR TUNE
S701–S710
KEY BOARD SWITCH
K00–K03
K10–K14
S0–S9
G1–G9
P1–P10
+5.6V
RESET Q703
RESET
HOLD SWITCH Q705
HOLD
IC701
SYSTEM CONTROL
TMP87CX70F–6001
SIRCS IN
REMOTE SENSOR IC703
XT IN
XT OUT
XT701 32KHz
X IN
X OUT
CF701 8MHz
AUB IN
AUB OUT
AUDIO BUS BUFFER Q706, 707
STEREO
SIGNAL
SI
SCK
SO
CE
VKK
MUTE OUT
+5.6V
GND
STEREO
TUNE
SI
CLOCK
SO
CE
CNJ701
VG
VF
VF
AU BUS
MUTE
CNJ702

4-2. SEMICONDUCTOR LEAD LAYOUTS

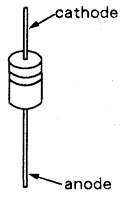
DTA114ES
DTC114ES
2SC2603-EF
2SC2669-OY
2SC3113-AB



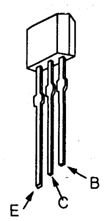
2SK246-GR3



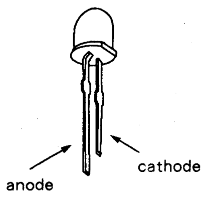
UZ-4.3BSA
1SS120


cathode
anode

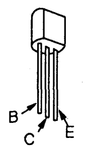
2SA1175-HFE
2SC2785-HFE



SEL2210S-D


anode
cathode

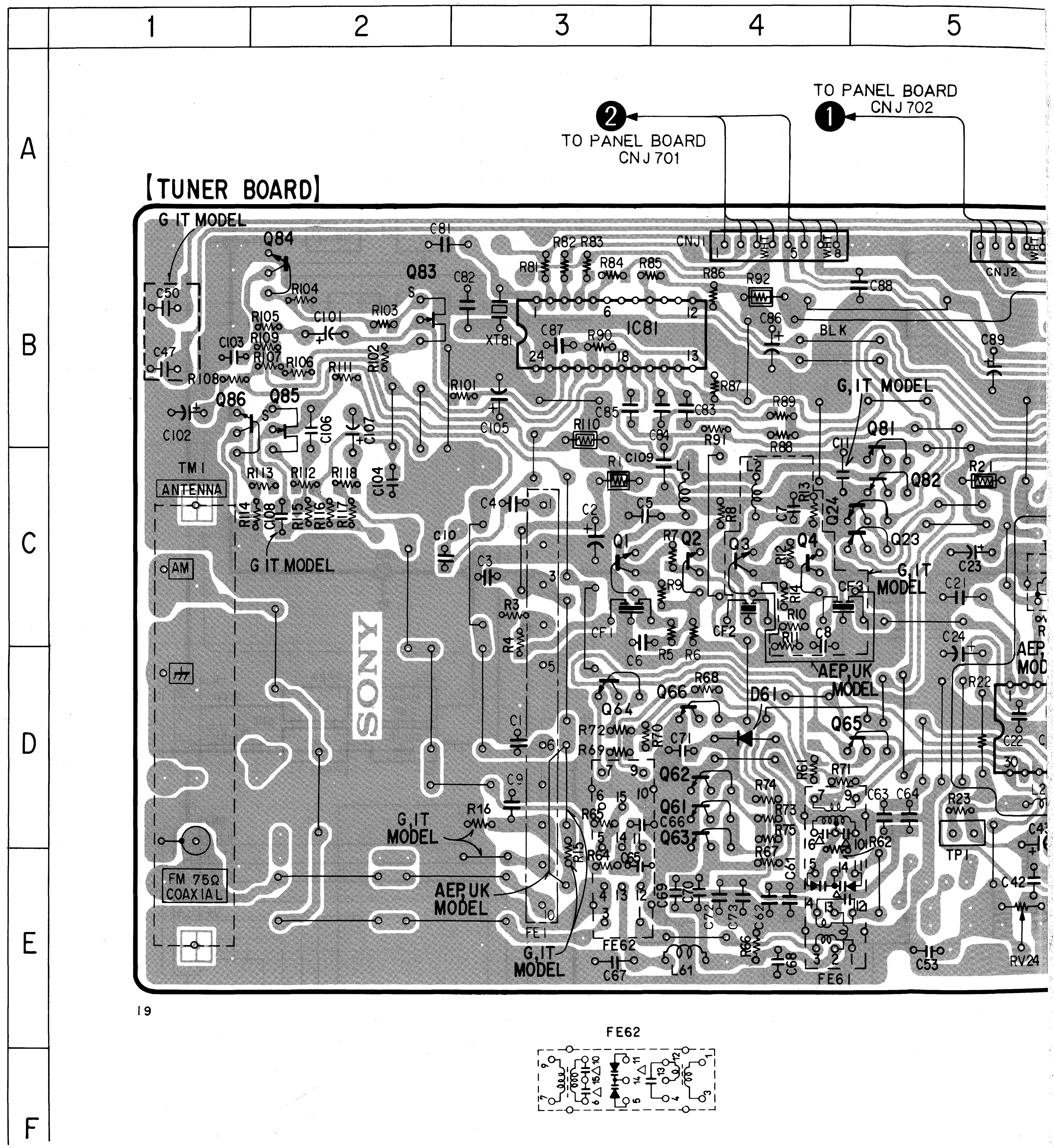
2SA1317-SU
2SC3330-T



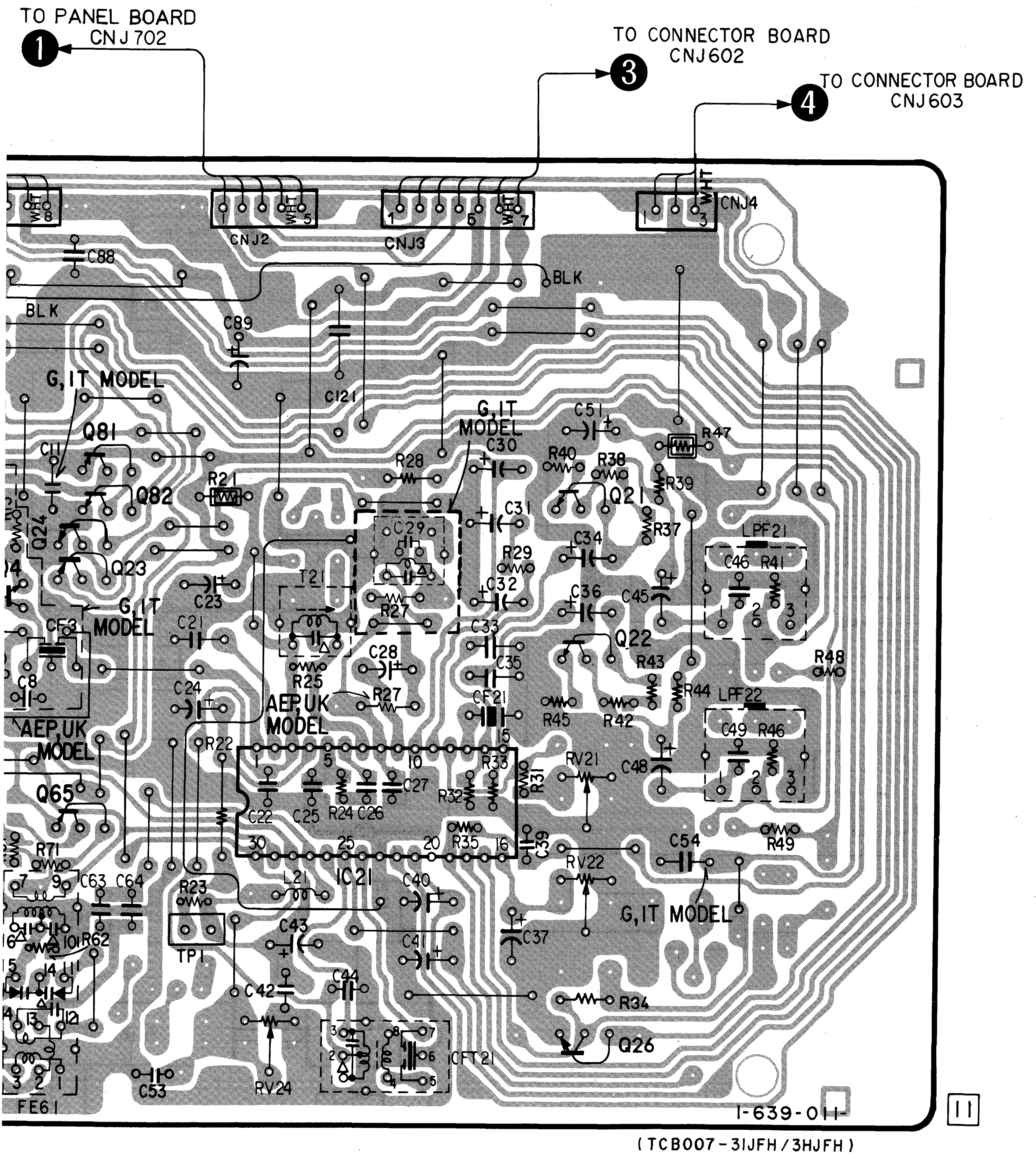
● SEMICONDUCTOR LOCATION

Ref. No	Location	
	H3600	H6600
D61	D – 4	D – 4
D701	G – 4	B – 5
D702	G – 4	B – 2
D707	H – 4	B – 3
D710	G – 2	B – 2
D711	G – 3	B – 3
D712	G – 7	A – 9
D714	G – 9	B – 5
D715	G – 10	B – 9
D716	G – 9	B – 9
D717	G – 8	A – 9
D718	G – 8	B – 2
IC21	C – 5	C – 5
IC81	C – 5	C – 5
IC701	G – 6	B – 6
IC702	G – 9	B – 9
IC703	G – 7	B – 9
Q1	C – 3	C – 3
Q2	C – 4	C – 4
Q3	C – 4	C – 4
Q4	C – 4	C – 4
Q21	C – 7	C – 7
Q22	C – 7	C – 7
Q23	C – 4	C – 4
Q24	C – 4	C – 4
Q26	E – 7	E – 7
Q61	D – 4	D – 4
Q62	D – 4	D – 4
Q63	D – 4	D – 4
Q64	D – 3	D – 3
Q65	D – 5	D – 5
Q66	D – 4	D – 4
Q81	C – 5	C – 5
Q82	C – 5	C – 5
Q701	G – 3	A – 2
Q702	F – 3	A – 2
Q703	G – 8	B – 8
Q705	H – 9	B – 8
Q706	G – 8	B – 9
Q707	G – 9	B – 9

4-3. PRINTED WIRING BOARD – TUNER SECTION –

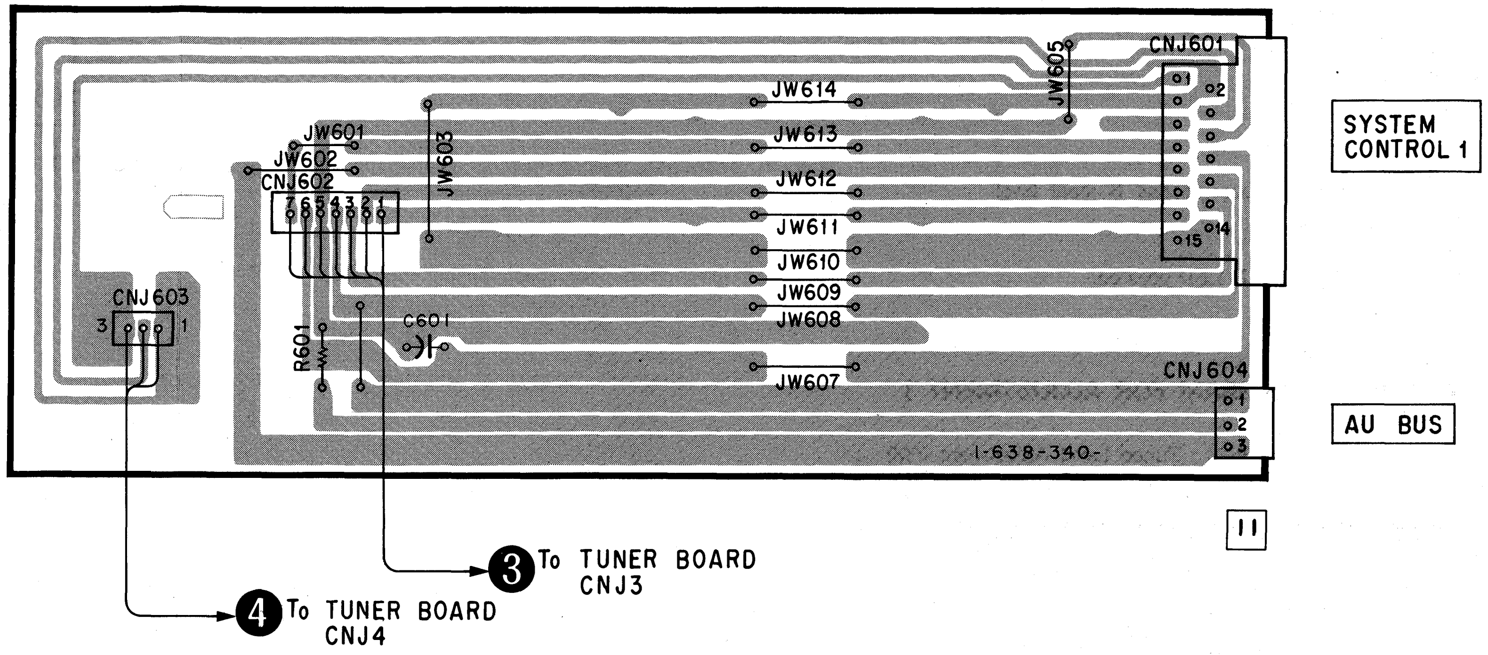

1
2
3
4
5
A
B
C
D
E
F
TO PANEL BOARD
CNJ 702
TO PANEL BOARD
CNJ 701
❶
❷
[TUNER BOARD]
G IT MODEL
Q84
Q83
Q85
Q86
Q81
Q82
Q1
Q2
Q3
Q4
Q23
Q24
Q61
Q62
Q63
Q64
Q65
Q66
IC81
D61
XT81
CNJ1
CNJ2
BLK
G, IT MODEL
TM1
ANTENNA
AM
SONY
FM 75Ω COAXIAL
G IT MODEL
G, IT MODEL
AEP, UK MODEL
FE1
FE61
FE62
L61
CF1
CF2
CF3
TP1
RV24
AEP, UK MODEL
G, IT MODEL
19
FE62

5 6 7 8 9 10 11 12 13



TO PANEL BOARD
❶ CNJ702
TO CONNECTOR BOARD
❸ CNJ602
TO CONNECTOR BOARD
❹ CNJ603
CNJ2
CNJ3
CNJ4
WHT
BLK
C88
C89
C121
G, IT MODEL
Q81
Q82
Q24
Q23
C11
R21
R28
C30
R40
R38
C51
R47
R39
Q21
R37
C31
C29
T21
R27
C23
C21
CF3
C8
C28
R25
AEP, UK MODEL
Q65
R71
C22
C25
R24
C26
C27
R32
R33
R31
R35
IC21
R22
C63
C64
R23
TP1
L21
C40
C41
C43
C42
C44
RV24
CFT21
C53
FE61
R62
C32
C33
C34
C35
C36
C45
CF21
Q22
R43
R44
R45
R42
LPF21
C46
R41
LPF22
C49
R46
R48
RV21
C48
C39
RV22
C54
R49
C37
R34
Q26
1-639-011-
11
(TCB007-31JFH/3HJFH)

【CONNECTOR BOARD】



CNJ601
JW605
JW614
JW613
JW612
JW611
JW610
JW609
JW608
JW607
JW601
JW602
CNJ602
JW603
CNJ603
R601
C601
CNJ604
SYSTEM CONTROL 1
AU BUS
1-638-340-
11
❸ To TUNER BOARD CNJ3
❹ To TUNER BOARD CNJ4

Note for schematic diagram:

- ○—— : indicated a lead wire mounted on the component side.
- ⌜⌟ : indicates side identified with part number.
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, 1/4W or less unless otherwise noted.
- △ : internal component.
- ▭ : nonflammable resistor

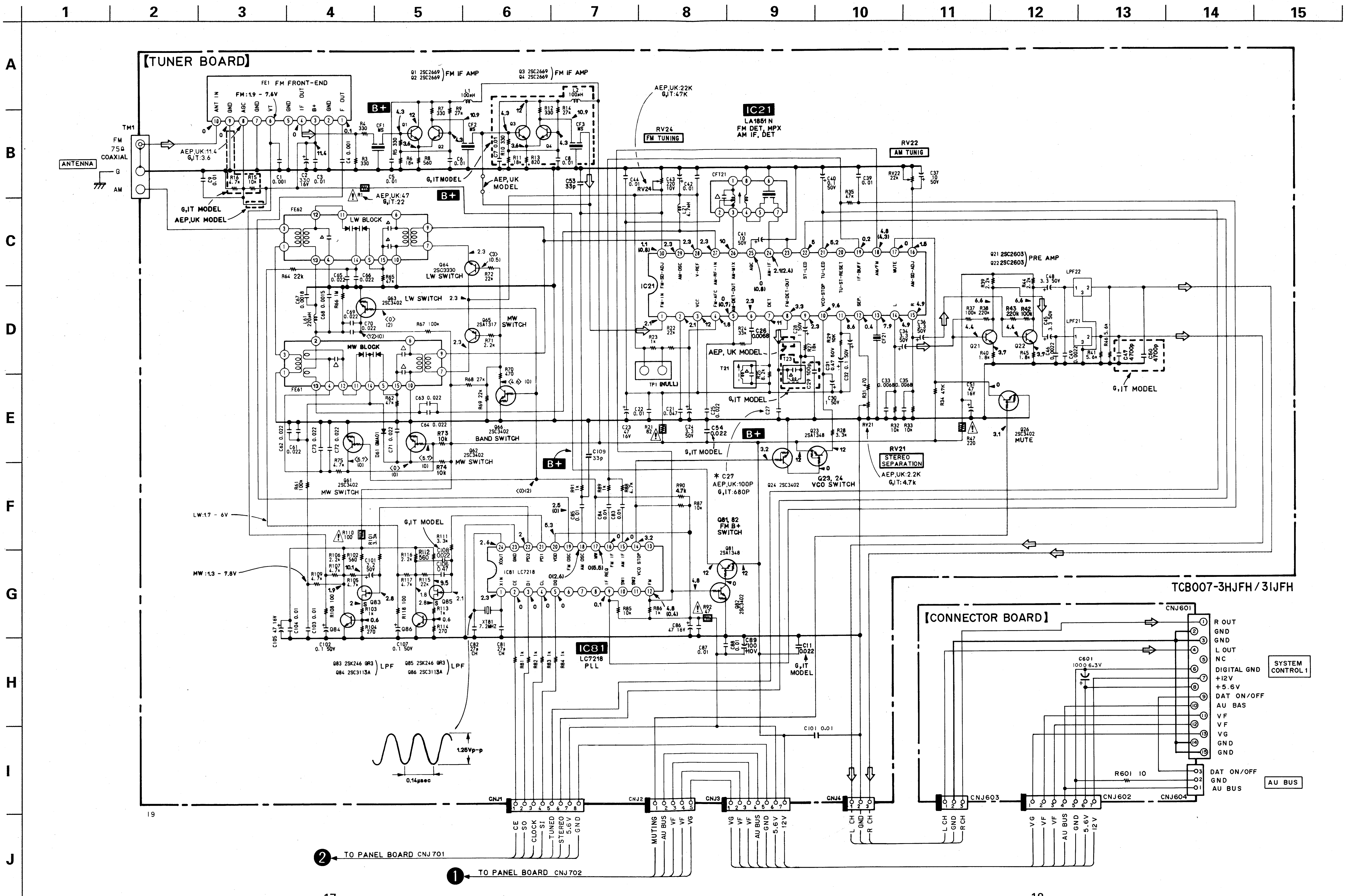
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- ▭ : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no -signal (detuned) conditions.

no mark : FM
( ) : MW
< > : LW

- Voltages are taken with a VOM (input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path
  ⇨ : FM
- G : Germany Model
- IT : Itarian Model

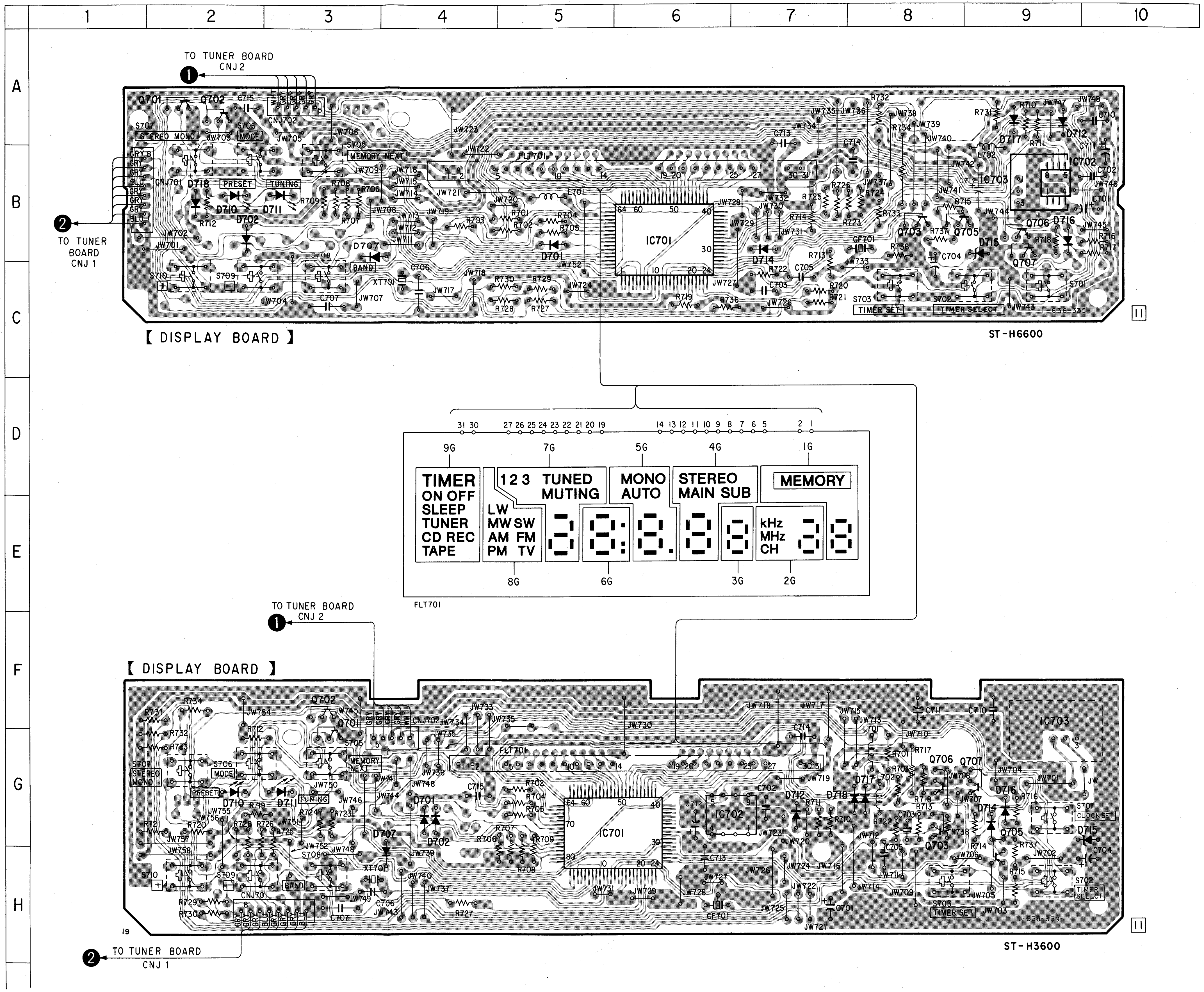
4-4. SCHEMATIC DIAGRAM – TUNER SECTION –



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
A B C D E F G H I J
【TUNER BOARD】
ANTENNA
TM1
FM 75Ω COAXIAL
G
AM
FE1 FM FRONT-END
FM:1.9 - 7.6V
AEP,UK:11.4 G,IT:3.6
G,IT MODEL
AEP,UK MODEL
Q1 2SC2669 Q2 2SC2669 FM IF AMP
Q3 2SC2669 Q4 2SC2669 FM IF AMP
B+
AEP,UK:47 G,IT:22
G,IT MODEL
AEP,UK MODEL
LW BLOCK
MW BLOCK
FE62
FE61
Q64 2SC3330 LW SWITCH
Q63 2SC3402 LW SWITCH
Q65 2SA1317 MW SWITCH
Q66 2SC3402 BAND SWITCH
Q62 2SC3402 MW SWITCH
Q61 2SC3402 MW SWITCH
AEP,UK:22K G,IT:47K
RV24 FM TUNING
IC21 LA1851N FM DET, MPX AM IF, DET
RV22 AM TUNIG
CFT21
AEP, UK MODEL
T21
T23
TP1 (NULL)
G,IT MODEL
Q21 2SC2603 Q22 2SC2603 PRE AMP
LPF22
LPF21
G,IT MODEL
Q26 2SC3402 MUTE
RV21 STEREO SEPARATION AEP,UK:2.2K G,IT:4.7k
Q23 2SA1348
Q24 2SC3402
Q23, 24 VCO SWITCH
* C27 AEP,UK:100P G,IT:680P
Q81, 82 FM B+ SWITCH
Q81 2SA1348
Q82 2SC3402
LW:1.7 - 6V
MW:1.3 - 7.8V
G,IT MODEL
IC81 LC7218
IC81 LC7218 PLL
X781 7.2MHZ
Q83 2SK246 (GR) Q84 2SC3113A LPF
Q85 2SK246 (GR) Q86 2SC3113A LPF
1.25Vp-p
0.14μsec
G,IT MODEL
C101 0.01
TCB007-3HJFH/31JFH
【CONNECTOR BOARD】
CNJ601
R OUT
GND
GND
L OUT
NC
DIGITAL GND
+12V
+5.6V
DAT ON/OFF
AU BAS
VF
VF
VG
GND
GND
SYSTEM CONTROL 1
C601 1000 6.3V
R601 10
DAT ON/OFF
GND
AU BUS
AU BUS
CNJ1
CE SO CLOCK SI TUNED STEREO 5.6V GND
CNJ2
MUTING AU BUS VF VF VG
CNJ3
VG VF VF AU BUS GND 5.6V 12V
CNJ4
L CH GND R CH
CNJ603
L CH GND R CH
CNJ602
VG VF VF AU BUS GND 5.6V 12V
CNJ604
19
② TO PANEL BOARD CNJ701
❶ TO PANEL BOARD CNJ702

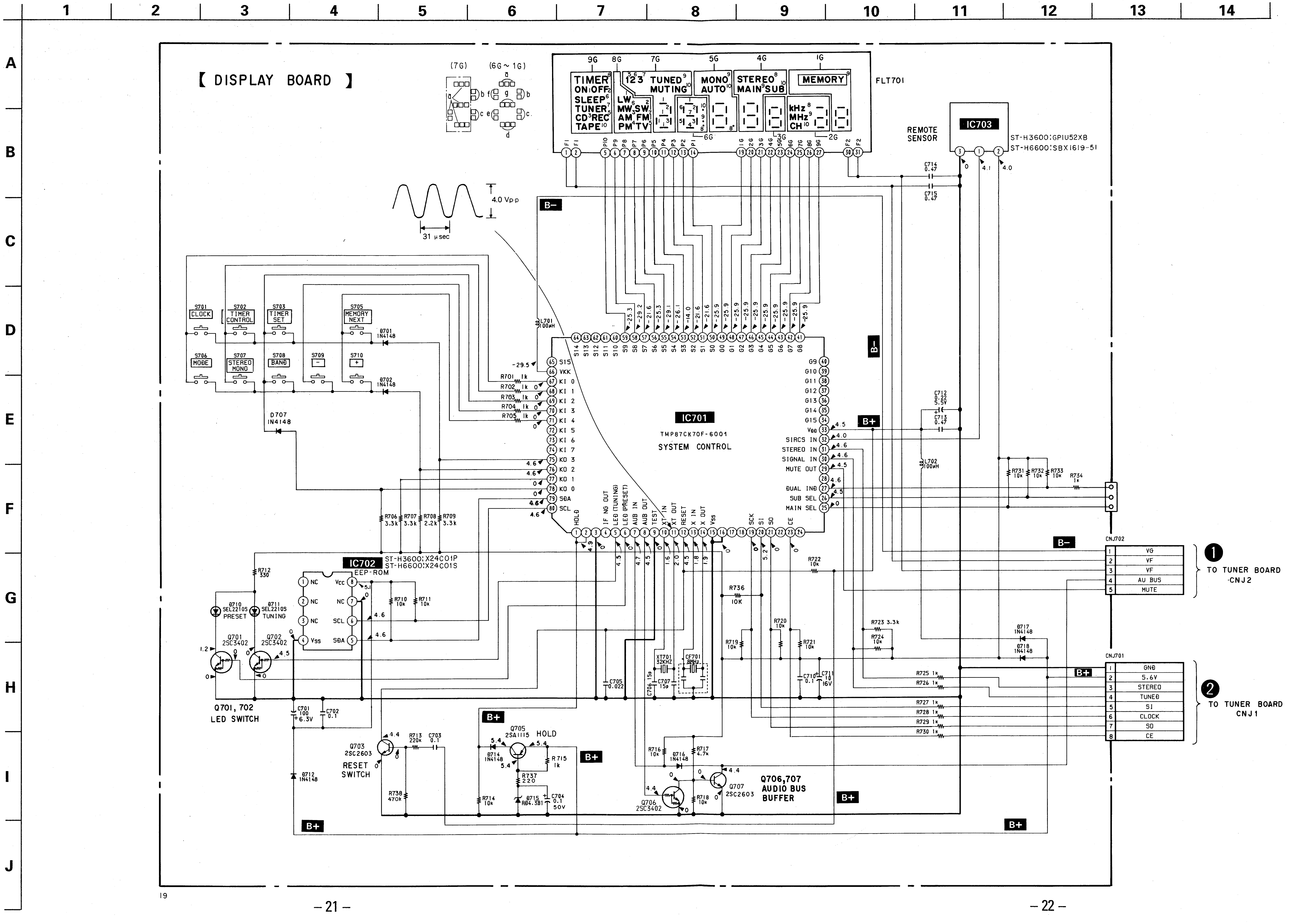
4-5. PRINTED WIRING BOARD – DISPLAY SECTION –

• See page 13 for semiconductor Location.


1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
G
H
TO TUNER BOARD CNJ2
TO TUNER BOARD CNJ 1
【 DISPLAY BOARD 】
ST-H6600
IC701
IC702
IC703
FLT701
STEREO MONO
MODE
MEMORY NEXT
PRESET
TUNING
BAND
TIMER SET
TIMER SELECT
CLOCK SET
31 30 27 26 25 24 23 22 21 20 19 14 13 12 11 10 9 8 7 6 5 2 1
9G
7G
5G
4G
1G
TIMER
ON OFF
SLEEP
TUNER
CD REC
TAPE
LW
MW SW
AM FM
PM TV
1 2 3 TUNED MUTING
MONO AUTO
STEREO MAIN SUB
MEMORY
kHz
MHz
CH
8G
6G
3G
2G
FLT701
TO TUNER BOARD CNJ 2
【 DISPLAY BOARD 】
TO TUNER BOARD CNJ 1
ST-H3600

4-6. SCHEMATIC DIAGRAM – DISPLAY SECTION –

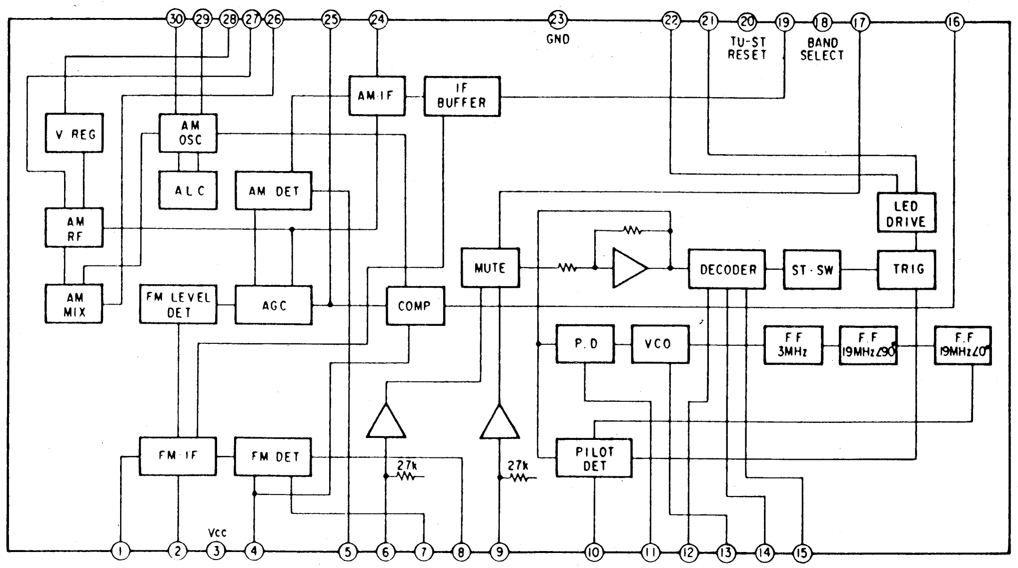
• See page 16 for note.



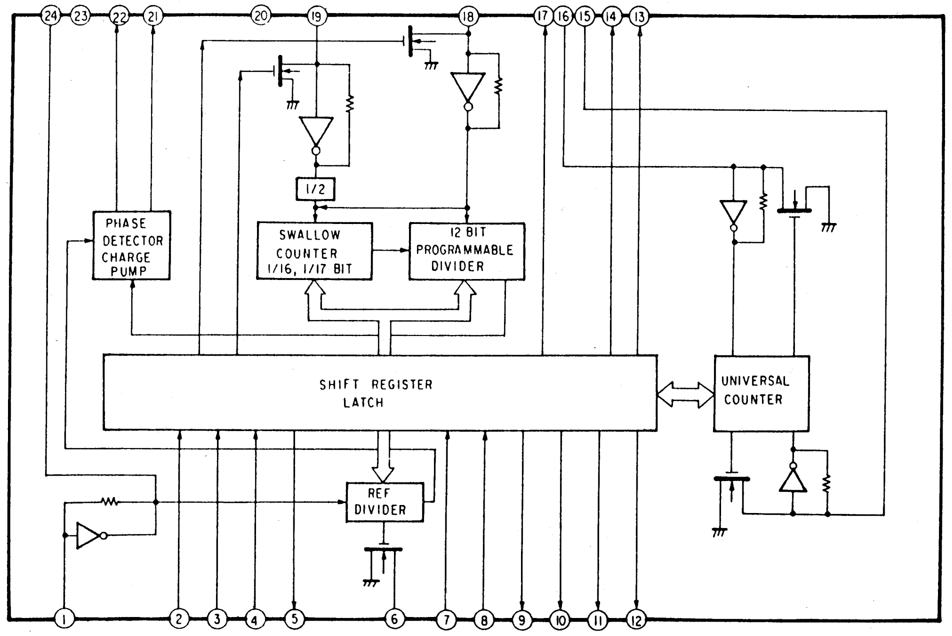
【 DISPLAY BOARD 】
FLT701
TIMER ON/OFF SLEEP TUNER CD REC TAPE
LW MW SW AM FM PM TV
TUNED MUTING
MONO AUTO
STEREO MAIN SUB
MEMORY
kHz MHz CH
9G 8G 7G 5G 4G 1G 6G 3G 2G
4.0 Vp-p
31 μsec
REMOTE SENSOR
IC703
ST-H3600:GP1U52XB
ST-H6600:SBX1619-51
C714 0.47
C715 0.47
S701 CLOCK
S702 TIMER CONTROL
S703 TIMER SET
S705 MEMORY NEXT
S706 MODE
S707 STEREO MONO
S708 BAND
S709 –
S710 +
D701 1N4148
D702 1N4148
D707 1N4148
L701 100μH
R701 1k
R702 1k
R703 1k
R704 1k
R705 1k
R706 3.3k
R707 3.3k
R708 2.2k
R709 3.3k
IC701
TMP87CK70F-6001
SYSTEM CONTROL
S15 VKK KI 0 KI 1 KI 2 KI 3 KI 4 KI 5 KI 6 KI 7 KO 3 KO 2 KO 1 KO 0 SDA SCL
G9 G10 G11 G12 G13 G14 G15 VDD SIRCS IN STEREO IN SIGNAL IN MUTE OUT DUAL IND SUB SEL MAIN SEL
HOLD IF NG OUT LED (TUNING) LED (PRESET) AUB IN AUB OUT TEST XT IN XT OUT RESET X IN X OUT Vss SCK SI SO CE
C712 0.22 5.5V
C713 0.47
L702 100μH
R731 10k
R732 10k
R733 10k
R734 1k
B–
B+
IC702
ST-H3600:X24C01P
ST-H6600:X24C01S
EEP-ROM
NC NC NC Vss Vcc NC SCL SDA
R710 10k
R711 10k
R712 330
D710 SEL2210S PRESET
D711 SEL2210S TUNING
Q701 2SC3402
Q702 2SC3402
Q701, 702 LED SWITCH
C701 100 6.3V
C702 0.1
D712 1N4148
Q703 2SC2603
RESET SWITCH
R713 220k
C703 0.1
R738 470k
Q705 2SA1115
HOLD
D714 1N4148
R715 1k
R737 220
R714 10k
D715 RD4.3B1
C704 0.1 50V
C705 0.022
XT701 32KHZ
C706 15p
C707 15p
CF701 8MHz
R736 10K
R719 10k
R720 10k
R721 10k
R722 10k
C710 0.1
C711 10 16V
R723 3.3k
R724 10k
D717 1N4148
D718 1N4148
R716 10k
D716 1N4148
R717 4.7k
R718 10k
Q706 2SC3402
Q707 2SC2603
Q706,707 AUDIO BUS BUFFER
R725 1k
R726 1k
R727 1k
R728 1k
R729 1k
R730 1k
CNJ702
VG VF VF AU BUS MUTE
❶ TO TUNER BOARD CNJ2
CNJ701
GND 5.6V STEREO TUNED SI CLOCK SO CE
❷ TO TUNER BOARD CNJ1
19

4-7. IC BLOCK DIAGRAMS

IC21 LA1851N


30
29
28
27
26
25
24
23
GND
22
21
20
TU-ST RESET
19
18
BAND SELECT
17
16
V REG
AM OSC
ALC
AM DET
AM IF
IF BUFFER
AM RF
AM MIX
FM LEVEL DET
AGC
COMP
MUTE
DECODER
ST·SW
LED DRIVE
TRIG
P.D
VCO
FF 3MHz
F.F 19MHz∠90°
F.F 19MHz∠0°
FM IF
FM DET
PILOT DET
27k
27k
Vcc
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

IC81 LC7218


24
23
22
21
20
19
18
17
16
15
14
13
1/2
PHASE DETECTOR CHARGE PUMP
SWALLOW COUNTER 1/16, 1/17 BIT
12 BIT PROGRAMMABLE DIVIDER
SHIFT REGISTER LATCH
UNIVERSAL COUNTER
REF DIVIDER
1
2
3
4
5
6
7
8
9
10
11
12

4-8. PIN FUNCTION OF IC701 SYSTEM CONTROLLER (TMP87CK70F-6001)

The terminals work to control tuner section (IC21, 81), FL tube display and reading and writing of IC702 (preset data), etc. according to key input and signal from the remote controller.

PIN No.	PIN NAME	I/O	ACTIVE	PIN FUNCTION
1	HOLD	I	↓	HOLD detecting interrupt terminal
2	HOLD RESET	I	↑	HOLD resetting interrupt terminal
3		I		Not in use
4	IF NGOUT	O	H	IF count NG output
5	LED1	O	H	TUNING LED ON
6	LED2	O	H	PRESET LED ON
7	AUB IN	I	L	AUDIO BUS input
8	AUB OUT	O	L	AUDIO BUS output
9	TEST	I	H	Test terminal
10	XT IN	I		Low frequency oscillator connection terminal (32KHz)
11	XT OUT	O		Low frequency oscillator connection terminal (32KHz)
12	RESET	I	L	Reset signal input
13	X IN	I		High frequency oscillator connection terminal (8MHz)
14	X OUT	O		High frequency oscillator connection terminal (8MHz)
15	VSS			GND
16		I		Not in use
17, 18		O		Not in use
19	SCK	O		PLL serial clock output
20	SI	I		PLL serial data input
21	SO	O		PLL serial data output
22				Not in use
23	CE	O	H	PLL chip enable
24				Not in use
25	MAIN SEL	O	L	Main sound selection terminal (Not in use)
26	SUB SEL	O	L	Sub sound selection terminal (Not in use)
27	DUAL IND	I	L	Sound dual signal detection terminal (Not in use)
28				Not in use
29	MUTE OUT	O	L	MUTING output
30	SIGNAL IN	I	L	TUNED input
31	STEREO IN	I	L	STEREO input
32	SIRCS IN	I	L	SIRCS input
33	VDD			+5V
34 - 40		O		Not in use
41 - 49	G0 - G8	O	H	FL tube digit output
50 - 59	S0 - S9	O	H	FL tube segment output
60 - 65		O	H	Not in use
66	VKK			FL tube driving power supply
67 - 71	KI0 - KI4	I	H	Key input
72		I		Not in use
73, 74				Not in use
75 - 78	KO0 - KO3	O	H	Key output
79	SDA	I/O		Data input/output for EEPROM
80	SCL	O		Clock output for EEPROM

SECTION 5

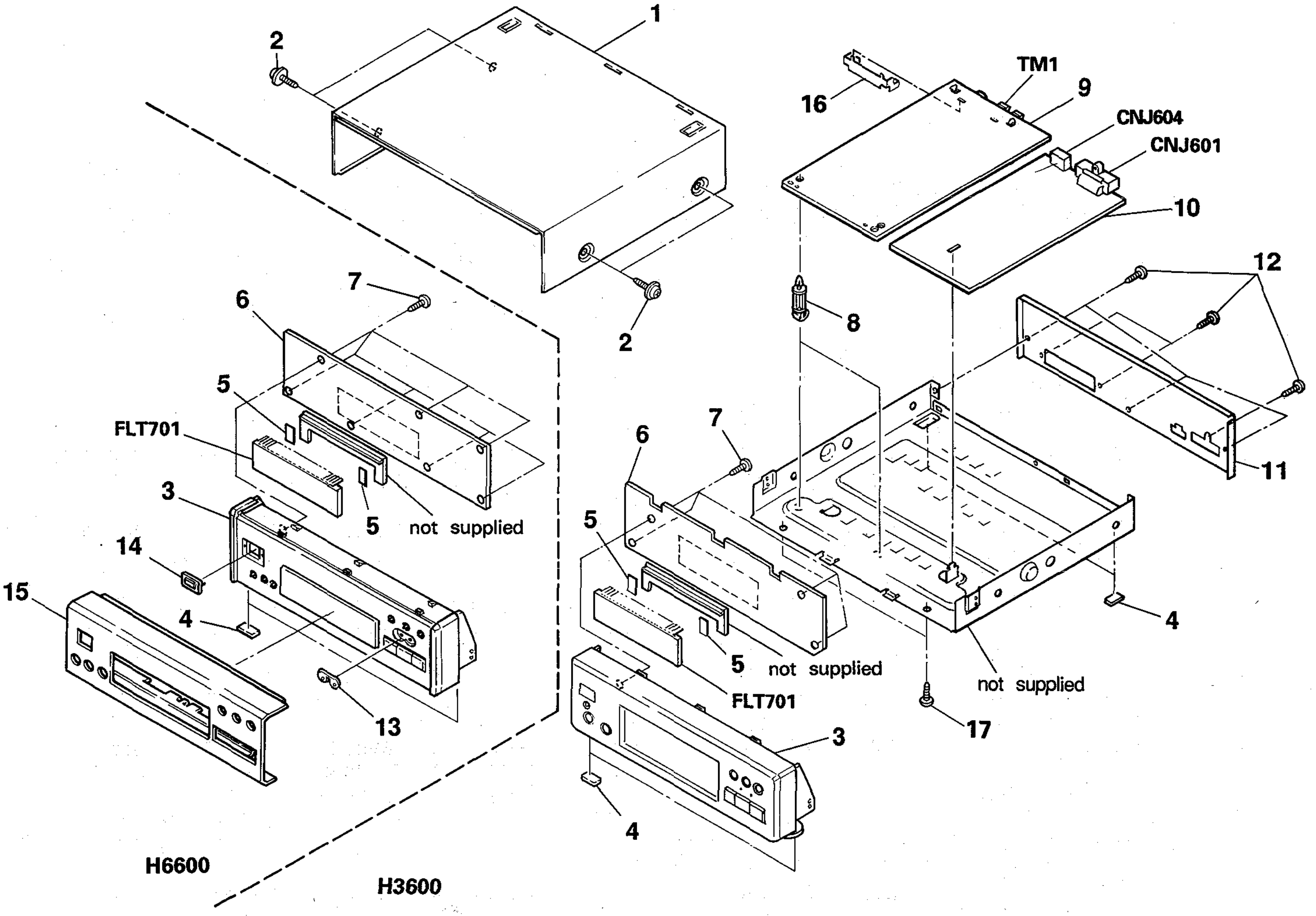
EXPLODED VIEW

NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB,BALANCE(WHITE)...(RED)
  ↑ Parts color ↑ Cabinet's color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

(1) CHASSIS SECTION



Ref. No.	Part No.	Description	Remarks
1	4-944-423-11	CASE (K206522) (H3600)	
	4-932-844-01	CASE (H6600)	
2	3-363-099-01	SCREW (CASE +3X8 TP2)	
3	X-4941-544-1	PANEL ASSY, ASSY (H3600)	
	X-4942-523-1	PANEL ASSY, ASSY (H6600)	
4	4-930-336-01	FOOT (FELT)	
5	* 4-932-810-11	CUSHION (FL)	
6	* A-4341-562-A	DISPLAY BOARD, COMPLETE (H3600: AEP, UK)	
	* A-4341-563-A	DISPLAY BOARD, COMPLETE (H3600: G, IT)	
	* A-4341-554-A	DISPLAY BOARD, COMPLETE (H6600: AEP, UK)	
	* A-4341-556-A	DISPLAY BOARD, COMPLETE (H6600: G, IT)	
7	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
8	* 4-914-008-01	HOLDER, PCB	
9	A-4303-367-A	TUNER BOARD(TCB007-3HJFH), COMPLETE(AEP, UK)	
	A-4303-368-A	TUNER BOARD(TCB007-3IJFH), COMPLETE(G, IT)	
10	1-638-340-11	CONNECTOR BOARD (H3600)	
	1-638-336-11	CONNECTOR BOARD (H6600)	
11	* 4-942-893-51	PANEL, BACK (H3600: AEP, UK)	
	* 4-942-893-81	PANEL, BACK (H3600: G)	
	* 4-942-893-91	PANEL, BACK (H3600: IT)	
	* 4-942-893-01	PANEL, BACK (H6600: AEP, UK)	
	* 4-942-893-31	PANEL, BACK (H6600: G)	
	* 4-942-893-41	PANEL, BACK (H6600: IT)	
12	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
13	4-944-427-01	INDICATOR (H6600)	
14	4-944-425-01	FILTER (H6600)	
15	4-944-429-11	PANEL (ST), FRONT (H6600)	
16	* 4-924-988-11	PLATE (ST), GROUND	
17	7-682-547-09	SCREW +BVTT 3X6(S) (H6600)	

TUNER

SECTION 6
ELECTRICAL PARTS LIST

NOTE:

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE : Metal Oxide-film resistor
  F : nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : μ, for example :
  uA...: μA..., uPA...: μPA...,
  uPB...: μPB..., uPC...: μPC...,
  uPD...: μPD...
- CAPACITORS
  uF :μF
- COILS
  uH : μH

Ref. No.	Part No.	Description				Remarks
	A-4303-367-A	TUNER BOARD(TCB007-3HJFH), COMPLETE(AEP, UK)				
	A-4303-368-A	TUNER BOARD(TCB007-3IJFH), COMPLETE(G, IT)				
		***************************************				
	* 4-924-988-11	PLATE (ST), GROUND				
		(CAPACITOR)				
C1	1-162-294-11	CERAMIC CHIP	0.001uF	20%	25V	
C2	1-124-477-11	ELECT	330uF	20%	16V	
C3	1-163-059-00	CERAMIC MELF	0.01uF	20%	16V	
C4	1-162-294-31	CERAMIC CHIP	0.001uF	20%	25V	
C5	1-163-059-00	CERAMIC MELF	0.01uF	20%	16V	
C6	1-163-059-00	CERAMIC MELF	0.01uF	20%	16V	
C7	1-163-059-00	CERAMIC MELF	0.01uF	20%	16V	(G, IT)
C8	1-163-059-00	CERAMIC MELF	0.01uF	20%	16V	(G, IT)
C9	1-163-059-00	CERAMIC MELF	0.01uF	20%	16V	
C11	1-101-005-00	CERAMIC	0.022uF		50V	(G, IT)
C21	1-101-006-00	CERAMIC	0.047uF		50V	
C22	1-163-059-00	CERAMIC MELF	0.01uF	20%	16V	
C23	1-124-477-11	ELECT	47uF	20%	25V	
C24	1-123-382-00	ELECT	3.3uF	20%	100V	
C25	1-163-063-00	CERAMIC MELF	0.022uF		25V	
C26	1-163-019-00	CERAMIC CHIP	0.0068uF	20%	12V	
C27	1-162-516-11	CERAMIC CHIP	100pF	10%	50V	(AEP, UK)
C27	1-163-007-11	CERAMIC CHIP	680pF	20%	50V	(G, IT)
C28	1-124-903-11	ELECT	1.0uF	20%	50V	
C29	1-162-516-11	CERAMIC CHIP	100pF	10%	50V	(G, IT)
C30	1-124-903-11	ELECT	1.0uF	20%	50V	
C31	1-124-902-00	ELECT	0.47uF	20%	50V	
C32	1-124-463-00	ELECT	0.1uF	20%	50V	
C33	1-130-481-00	MYLAR	0.0068uF	5%	50V	
C34	1-123-382-00	ELECT	3.3uF	20%	100V	
C35	1-130-481-00	MYLAR	0.0068uF	5%	50V	
C36	1-123-382-00	ELECT	3.3uF	20%	100V	
C37	1-124-907-11	ELECT	10uF	20%	50V	
C39	1-163-059-00	CERAMIC MELF	0.01uF	20%	16V	
C40	1-124-463-00	ELECT	0.1uF	20%	50V	
C41	1-124-907-11	ELECT	10uF	20%	50V	
C42	1-163-059-00	CERAMIC MELF	0.01uF	20%	16V	
C43	1-126-176-11	ELECT	220uF	20%	10V	
C44	1-163-059-00	CERAMIC MELF	0.01uF	20%	16V	
C45	1-123-382-00	ELECT	3.3uF	20%	100V	
C46	1-161-375-00	CERAMIC CHIP	0.0022uF	20%	25V	
C47	1-163-170-00	CERAMIC CHIP	0.0047uF	20%	25V	(G, IT)
C48	1-123-382-00	ELECT	3.3uF	20%	100V	
C49	1-161-375-00	CERAMIC CHIP	0.0022uF	20%	25V	
C50	1-163-170-00	CERAMIC CHIP	0.0047uF	20%	25V	(G, IT)
C51	1-124-477-11	ELECT	47uF	20%	25V	
C53	1-163-105-00	CERAMIC CHIP	33pF	5%	50V	
C54	1-101-005-00	CERAMIC	0.022uF		50V	(G, IT)
C61	1-163-063-00	CERAMIC MELF	0.022uF		25V	
C62	1-163-063-00	CERAMIC MELF	0.022uF		25V	
C63	1-163-063-00	CERAMIC MELF	0.022uF		25V	
C64	1-163-063-00	CERAMIC MELF	0.022uF		25V	
C65	1-163-063-00	CERAMIC MELF	0.022uF		25V	
C66	1-163-063-00	CERAMIC MELF	0.022uF		25V	
C67	1-102-120-00	CERAMIC	0.0018uF	10%	50V	
C68	1-163-111-11	CERAMIC CHIP	0.0015uF	20%	25V	
C69	1-163-063-00	CERAMIC MELF	0.022uF		25V	
C70	1-163-063-00	CERAMIC MELF	0.022uF		25V	
C71	1-163-063-00	CERAMIC MELF	0.022uF		25V	
C72	1-163-063-00	CERAMIC MELF	0.022uF		25V	
C73	1-163-063-00	CERAMIC MELF	0.022uF		25V	
C81	1-102-961-00	CERAMIC	27pF	5%	50V	
C82	1-102-961-00	CERAMIC	27pF	5%	50V	
C83	1-163-059-00	CERAMIC MELF	0.01uF	20%	16V	
C84	1-163-059-00	CERAMIC MELF	0.01uF	20%	16V	

Ref. No.	Part No.	Description	Remarks
C85	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V	
C86	1-124-477-11	ELECT 47uF 20% 25V	
C87	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V	
C88	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V	
C89	1-124-443-00	ELECT 100uF 20% 10V	
C101	1-124-925-11	ELECT 2.2uF 20% 100V	
C102	1-124-463-00	ELECT 0.1uF 20% 50V	
C103	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V	
C104	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V	
C105	1-124-477-11	ELECT 47uF 20% 25V	
C106	1-136-173-00	FILM 0.47uF 5% 50V	
C107	1-124-463-00	ELECT 0.1uF 20% 50V	
C108	1-163-063-00	CERAMIC MELF 0.022uF 25V	(G, IT)
C109	1-162-211-31	CERAMIC 33pF 5% 50V	
C121	1-161-379-00	CERAMIC 0.01uF 30% 16V	(G, IT)

(FILTER)

Ref. No.	Part No.	Description	Remarks
CF1	1-567-389-11	FILTER, CERAMIC	
CF2	1-567-389-11	FILTER, CERAMIC	
CF3	1-567-389-11	FILTER, CERAMIC	(G, IT)

(OSCILLATOR)

Ref. No.	Part No.	Description	Remarks
CF21	1-577-075-11	OSCILLATOR, CERAMIC (19KHz)	

(IF TRANSFORMER)

Ref. No.	Part No.	Description	Remarks
CFT21	1-404-853-11	TRANSFORMER, IF (CERAMIC FILTER)	

(CONNECTOR)

Ref. No.	Part No.	Description	Remarks
CNJ1	* 1-564-342-11	SOCKET, CONNECTOR 8P	
CNJ2	* 1-564-339-00	PIN, CONNECTOR 5P	
CNJ3	* 1-564-341-11	PIN, CONNECTOR 7P	
CNJ4	* 1-564-337-00	PIN, CONNECTOR 3P	

(DIODE)

Ref. No.	Part No.	Description	Remarks
D61	8-719-912-20	DIODE ISS120	

(FM FRONT END)

Ref. No.	Part No.	Description	Remarks
FE1	1-463-857-11	FRONT END, FM	(G, IT)
FE1	1-463-862-21	FRONT END, FM	(AEP, UK)

(ENCAPSULATED COMPONENT)

Ref. No.	Part No.	Description	Remarks
FE61	1-236-462-11	ENCAPSULATED COMPONENT (MW RF)	
FE62	1-236-463-11	ENCAPSULATED COMPONENT (LW RF)	

(IC)

Ref. No.	Part No.	Description	Remarks
IC21	8-759-821-45	IC LA1851N	
IC81	8-759-820-91	IC LC7218	

(INDUCTOR)

Ref. No.	Part No.	Description	Remarks
L1	1-410-645-31	MICRO INDUCTOR 100uH	
L2	1-410-645-31	MICRO INDUCTOR 100uH	(G, IT)
L21	1-407-500-00	MICRO INDUCTOR 4.7mH	
L61	1-410-525-11	MICRO INDUCTOR 220uH	

(LOW PASS FILTER)

Ref. No.	Part No.	Description	Remarks
LPF21	1-235-164-00	FILTER, LOW PASS	
LPF22	1-235-164-00	FILTER, LOW PASS	

(TRANSISTOR)

Ref. No.	Part No.	Description	Remarks
Q1	8-729-230-99	TRANSISTOR 2SC2669-OY	
Q2	8-729-230-99	TRANSISTOR 2SC2669-OY	
Q3	8-129-230-99	TRANSISTOR 2SC2669-OY	(G, IT)
Q4	8-129-230-99	TRANSISTOR 2SC2669-OY	(G, IT)
Q21	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q22	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q23	8-729-900-61	TRANSISTOR DTA114ES	
Q24	8-729-900-80	TRANSISTOR DTC114ES	
Q26	8-729-900-80	TRANSISTOR DTC114ES	
Q61	8-729-900-80	TRANSISTOR DTC114ES	
Q62	8-729-900-80	TRANSISTOR DTC114ES	
Q63	8-729-900-80	TRANSISTOR DTC114ES	
Q64	8-729-820-24	TRANSISTOR 2SC3330-T	
Q65	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q66	8-729-900-80	TRANSISTOR DTC114ES	
Q81	8-729-900-61	TRANSISTOR DTA114ES	
Q82	8-729-900-80	TRANSISTOR DTC114ES	
Q83	8-729-202-67	TRANSISTOR 2SK246GR3	
Q84	8-729-230-93	TRANSISTOR 2SC3113-AB	
Q85	8-729-202-67	TRANSISTOR 2SK246GR3	
Q86	8-729-230-93	TRANSISTOR 2SC3113-AB	

(RESISTOR)

Ref. No.	Part No.	Description	Remarks
R1	⚠ 1-249-397-11	CARBON (SMALL) 22 5% 1/4W F	(G, IT)
R1	⚠ 1-249-401-11	CARBON (SMALL) 47 5% 1/4W F	(AEP, UK)
R3	1-249-329-11	CARBON MELF 330 5% 1/8W	
R4	1-249-329-11	CARBON MELF 330 5% 1/8W	
R5	1-249-329-11	CARBON MELF 330 5% 1/8W	
R6	1-249-350-11	CARBON MELF 18K 5% 1/8W	
R7	1-249-329-11	CARBON MELF 330 5% 1/8W	
R8	1-249-332-11	CARBON MELF 560 5% 1/8W	
R9	1-249-352-11	CARBON MELF 27K 5% 1/8W	
R10	1-249-329-11	CARBON MELF 330 5% 1/8W	(G, IT)
R11	1-249-350-11	CARBON MELF 18K 5% 1/8W	(G, IT)
R12	1-249-329-11	CARBON MELF 330 5% 1/8W	(G, IT)
R13	1-249-334-11	CARBON MELF 820 5% 1/8W	(G, IT)
R14	1-249-352-11	CARBON MELF 27K 5% 1/8W	(G, IT)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

TUNER CONNECTOR DISPLAY

Ref. No.		Part No.	Description	Remarks
R15		1-249-374-11	CARBON MELF 10K 5% 1/8W	(G, IT)
R16		1-249-343-11	CARBON MELF 4.7K 5% 1/8W	(G, IT)
R21	⚠	1-249-404-00	CARBON (SMALL) 82 5% 1/4W	F
R22		1-249-433-11	CARBON (SMALL) 22K 5% 1/4W	
R23		1-249-335-11	CARBON MELF 1K 5% 1/8W	
R24		1-249-353-11	CARBON MELF 33K 5% 1/8W	
R25		1-249-346-11	CARBON MELF 8.2K 5% 1/8W	
R27		1-249-432-11	CARBON (SMALL) 18K 5% 1/4W	
R28		1-249-423-11	CARBON (SMALL) 3.3K 5% 1/4W	
R29		1-249-347-11	CARBON MELF 10K 5% 1/8W	
R31		1-249-331-11	CARBON MELF 470 5% 1/8W	
R32		1-249-347-11	CARBON MELF 10K 5% 1/8W	
R33		1-249-347-11	CARBON MELF 10K 5% 1/8W	
R34		1-249-437-11	CARBON (SMALL) 47K 5% 1/4W	
R35		1-249-355-11	CARBON MELF 47K 5% 1/8W	
R37		1-249-359-11	CARBON MELF 100K 5% 1/8W	
R38		1-249-363-11	CARBON MELF 220K 5% 1/8W	
R39		1-249-339-11	CARBON MELF 2.2K 5% 1/8W	
R40		1-249-338-11	CARBON MELF 1.8K 5% 1/8W	
R41		1-249-344-11	CARBON MELF 5.6K 5% 1/8W	
R42		1-249-359-11	CARBON MELF 100K 5% 1/8W	
R43		1-249-363-11	CARBON MELF 220K 5% 1/8W	
R44		1-249-339-11	CARBON MELF 2.2K 5% 1/8W	
R45		1-249-338-11	CARBON MELF 1.8K 5% 1/8W	
R46		1-249-344-11	CARBON MELF 5.6K 5% 1/8W	
R47	⚠	1-249-409-11	CARBON (SMALL) 220 5% 1/4W	F
R48		1-249-359-11	CARBON MELF 100K 5% 1/8W	
R49		1-249-359-11	CARBON MELF 100K 5% 1/8W	
R61		1-249-359-11	CARBON MELF 100K 5% 1/8W	
R62		1-249-355-11	CARBON MELF 47K 5% 1/8W	
R64		1-249-351-11	CARBON MELF 22K 5% 1/8W	
R65		1-249-355-11	CARBON MELF 47K 5% 1/8W	
R66		1-215-493-00	CARBON MELF 1M 5% 1/5W	
R67		1-249-359-11	CARBON MELF 100K 5% 1/8W	
R68		1-249-352-11	CARBON MELF 27K 5% 1/8W	
R69		1-249-351-11	CARBON MELF 22K 5% 1/8W	
R70		1-249-331-11	CARBON MELF 470 5% 1/8W	
R71		1-249-339-11	CARBON MELF 2.2K 5% 1/8W	
R72		1-249-351-11	CARBON MELF 22K 5% 1/8W	
R73		1-249-347-11	CARBON MELF 10K 5% 1/8W	
R74		1-249-347-11	CARBON MELF 10K 5% 1/8W	
R75		1-249-343-11	CARBON MELF 4.7K 5% 1/8W	
R81		1-249-335-11	CARBON MELF 1K 5% 1/8W	
R82		1-249-335-11	CARBON MELF 1K 5% 1/8W	
R83		1-249-335-11	CARBON MELF 1K 5% 1/8W	
R84		1-249-335-11	CARBON MELF 1K 5% 1/8W	
R85		1-249-347-11	CARBON MELF 10K 5% 1/8W	
R86		1-249-335-11	CARBON MELF 1K 5% 1/8W	
R87		1-249-347-11	CARBON MELF 10K 5% 1/8W	

Ref. No.		Part No.	Description	Remarks
R88		1-249-343-11	CARBON MELF 4.7K 5% 1/8W	
R89		1-249-335-11	CARBON MELF 1K 5% 1/8W	
R90		1-249-343-11	CARBON MELF 4.7K 5% 1/8W	
R91		1-249-335-11	CARBON MELF 1K 5% 1/8W	
R92	⚠	1-249-401-11	CARBON (SMALL) 47 5% 1/4W	F
R101		1-249-341-11	CARBON MELF 3.3K 5% 1/8W	
R102		1-249-332-11	CARBON MELF 560 5% 1/8W	
R103		1-249-335-11	CARBON MELF 1K 5% 1/8W	
R104		1-249-328-11	CARBON MELF 270 5% 1/8W	
R105		1-249-343-11	CARBON MELF 4.7K 5% 1/8W	
R106		1-249-339-11	CARBON MELF 2.2K 5% 1/8W	
R107		1-249-343-11	CARBON MELF 4.7K 5% 1/8W	
R108		1-249-323-11	CARBON MELF 100 5% 1/8W	
R109		1-249-343-11	CARBON MELF 4.7K 5% 1/8W	
R110	⚠	1-249-405-11	CARBON (SMALL) 100 5% 1/4W	F
R111		1-249-341-11	CARBON MELF 3.3K 5% 1/8W	
R112		1-249-332-11	CARBON MELF 560 5% 1/8W	
R113		1-249-335-11	CARBON MELF 1K 5% 1/8W	
R114		1-249-328-11	CARBON MELF 270 5% 1/8W	
R115		1-249-351-11	CARBON MELF 22K 5% 1/8W	
R116		1-249-339-11	CARBON MELF 2.2K 5% 1/8W	
R117		1-249-343-11	CARBON MELF 4.7K 5% 1/8W	
R118		1-249-323-11	CARBON MELF 100 5% 1/8W	

(VARIABLE RESISTOR)

RV21		1-238-598-11	RES, ADJ, CARBON 2.2K (AEP, UK)
RV21		1-238-599-11	RES, ADJ, CARBON 4.7K (G, IT)
RV22		1-238-601-11	RES, ADJ, CARBON 22K
RV24		1-238-601-11	RES, ADJ, CARBON 22K (AEP, UK)
RV24		1-238-602-11	RES, ADJ, CARBON 47K (G, IT)

(TRANSFORMER)

T21		1-404-807-11	TRANSFORMER, DISCRIMINATOR
T23		1-236-465-11	ENCAPSULATED COMPONENT (G, IT)

(TERMINAL)

TM1	*	1-537-138-31	TERMINAL BOARD (ANTENNA)

(CONNECTOR PIN)

TP1	*	1-560-060-00	PIN, CONNECTOR 2P

(CRYSTAL VIBRATOR)

XT81		1-577-126-11	VIBRATOR, CRYSTAL (7.2MHz)

****

1-638-340-11 CONNECTOR BOARD (H3600)
1-638-336-11 CONNECTOR BOARD (H6600)
****

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

Ref. No.	Part No.	Description	Remarks
	* A-4341-562-A	DISPLAY BOARD, COMPLETE (H3600: AEP, UK)	
	* A-4341-563-A	DISPLAY BOARD, COMPLETE (H3600: G, IT)	
	* A-4341-554-A	DISPLAY BOARD, COMPLETE (H6600: AEP, UK)	
	* A-4341-556-A	DISPLAY BOARD, COMPLETE (H6600: G, IT)	
		**************************************	
	* 4-932-810-11	CUSHION (FL)	
		(CAPACITOR)	
C601	1-124-471-00	ELECT 1000uF 20% 6.3V	
C701	1-126-177-11	ELECT 100uF 20% 10V	
C702	1-164-159-11	CERAMIC 0.1uF 50V	
C703	1-164-159-11	CERAMIC 0.1uF 50V	
C704	1-124-463-00	ELECT 0.1uF 20% 50V	
C705	1-161-494-00	CERAMIC 0.022uF 25V	
C706	1-162-203-31	CERAMIC 15PF 5% 50V	
C707	1-162-203-31	CERAMIC 15PF 5% 50V	
C710	1-164-159-11	CERAMIC 0.1uF 50V	
C711	1-126-157-11	ELECT 10uF 20% 16V	
C712	1-125-624-11	DUBLE LAYERS 0.22F 5.5V	
C713	1-136-173-00	FILM 0.47uF 5% 50V	
C714	1-136-173-00	FILM 0.47uF 5% 50V	
C715	1-136-173-00	FILM 0.47uF 5% 50V	
		(CERAMIC VIBRATOR)	
CF701	1-579-125-11	VIBRATOR, CERAMIC (8MHz)	
		(CONNECTOR)	
CNJ601	* 1-566-859-11	SOCKET, CONNECTOR 15P	
CNJ602	* 1-564-341-11	PIN, CONNECTOR 7P	
CNJ603	* 1-564-337-00	PIN, CONNECTOR 3P	
CNJ604	* 1-565-561-11	PIN, CONNECTOR 3P	
CNJ701	* 1-564-342-11	PIN, CONNECTOR 8P	
CNJ702	* 1-564-339-00	PIN, CONNECTOR 5P	
		(DIODE)	
D701	8-719-912-20	DIODE 1SS120	
D702	8-719-912-20	DIODE 1SS120	
D707	8-719-912-20	DIODE 1SS120	
D710	8-719-301-39	DIODE SEL2210S-D (PRESET)	
D711	8-719-301-39	DIODE SEL2210S-D (TUNING)	
D712	8-719-912-20	DIODE 1SS120	
D714	8-719-912-20	DIODE 1SS120	
D715	8-719-010-28	DIODE UZ-4.3BSA	
D716	8-719-912-20	DIODE 1SS120	
D717	8-719-912-20	DIODE 1SS120	
D718	8-719-912-20	DIODE 1SS120	

Ref. No.	Part No.	Description	Remarks
		(INDICATOR)	
FLT701 ⚠	1-519-651-11	INDICATOR TUBE, FLUORESCENT	
		(IC)	
IC701	8-759-246-31	IC TMP87CK70F-6001	
IC702	8-759-500-31	IC X24C01P (H3600)	
IC702	8-759-504-12	IC X24C01S (H6600)	
IC703	8-749-920-83	IC GP1U52XB (H3600)	
IC703	8-741-100-63	IC SBX1619-51 (H6600)	
		(COIL)	
L701	1-410-521-11	INDUCTOR 100uH	
L702	1-410-521-11	INDUCTOR 100uH	
		(TRANSISTOR)	
Q701	8-729-900-80	TRANSISTOR DTC114ES	
Q702	8-729-900-80	TRANSISTOR DTC114ES	
Q703	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q705	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q706	8-729-900-80	TRANSISTOR DTC114ES	
Q707	8-729-620-05	TRANSISTOR 2SC2603-EF	
		(RESISTOR)	
R601	1-249-393-11	CARBON 10 5% 1/4W	
R701	1-249-417-11	CARBON 1K 5% 1/4W	
R702	1-249-417-11	CARBON 1K 5% 1/4W	
R703	1-249-417-11	CARBON 1K 5% 1/4W	
R704	1-249-417-11	CARBON 1K 5% 1/4W	
R705	1-249-417-11	CARBON 1K 5% 1/4W	
R706	1-249-423-11	CARBON 3.3K 5% 1/4W	
R707	1-249-423-11	CARBON 3.3K 5% 1/4W	
R708	1-249-421-11	CARBON 2.2K 5% 1/4W	
R709	1-249-423-11	CARBON 3.3K 5% 1/4W	
R710	1-249-429-11	CARBON 10K 5% 1/4W	
R711	1-249-429-11	CARBON 10K 5% 1/4W	
R712	1-249-411-11	CARBON 330 5% 1/4W	
R713	1-247-887-00	CARBON 220K 5% 1/4W	
R714	1-249-429-11	CARBON 10K 5% 1/4W	
R715	1-249-417-11	CARBON 1K 5% 1/4W	
R716	1-249-429-11	CARBON 10K 5% 1/4W	
R717	1-249-425-11	CARBON 4.7K 5% 1/4W	
R718	1-249-429-11	CARBON 10K 5% 1/4W	
R719	1-249-429-11	CARBON 10K 5% 1/4W	
R720	1-249-429-11	CARBON 10K 5% 1/4W	
R721	1-249-429-11	CARBON 10K 5% 1/4W	
R722	1-249-429-11	CARBON 10K 5% 1/4W	
R723	1-249-423-11	CARBON 3.3K 5% 1/4W	
R724	1-249-429-11	CARBON 10K 5% 1/4W	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

CONNECTOR DISPLAY

Ref. No.	Part No.	Description	Remarks
R725	1-249-417-11	CARBON 1K 5% 1/4W	
R726	1-249-417-11	CARBON 1K 5% 1/4W	
R727	1-249-417-11	CARBON 1K 5% 1/4W	
R728	1-249-417-11	CARBON 1K 5% 1/4W	
R729	1-249-417-11	CARBON 1K 5% 1/4W	
R730	1-249-417-11	CARBON 1K 5% 1/4W	
R731	1-249-429-11	CARBON 10K 5% 1/4W	
R732	1-249-429-11	CARBON 10K 5% 1/4W	
R733	1-249-429-11	CARBON 10K 5% 1/4W	
R734	1-249-417-11	CARBON 1K 5% 1/4W	
R736	1-249-429-11	CARBON 10K 5% 1/4W	
R737	1-249-409-11	CARBON 220 5% 1/4W	
R738	1-247-895-00	CARBON 470K 5% 1/4W	
		〈 SWITCH 〉	
S701	1-554-303-21	SWITCH, TACTILE (CLOCK)	
S702	1-554-303-21	SWITCH, TACTILE (TIMER CONTROL)	
S703	1-554-303-21	SWITCH, TACTILE (TIMER SET)	
S705	1-554-303-21	SWITCH, TACTILE (MEMORY NEXT)	
S706	1-554-303-21	SWITCH, TACTILE (MODE)	
S707	1-554-303-21	SWITCH, TACTILE (STEREO/MONO)	
S708	1-554-303-21	SWITCH, TACTILE (BAND)	
S709	1-554-303-21	SWITCH, TACTILE (TUNING -)	
S710	1-554-303-21	SWITCH, TACTILE (TUNING +)	
		〈 CRYSTAL VIBRATOR 〉	
XT701	1-527-997-22	VIBRATOR, CRYSTAL (32kHz)	

Sony Corporation
Audio Group

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Published by Customer Relations and Service Group

TC-H2600/H3600

SERVICE MANUAL

AEP Model
UK Model
E Model
Australian Model
TC-H2600
TC-H3600

US Model
Canadian Model
TC-H3600

SONY
AUTO REVERSE
AUTO REVERSE

This set is a deck block of the following models.

MHC-2600	(TC-H2600 :	AEP, UK/
	TC-H3600 :	US, Canadian),
FH-E737CD	(TC-H2600 :	E, Australian),
MHC-3600	(TC-H3600 :	AEP, UK, US, Canadian),
FH-E838CD	(TC-H3600 :	E, Australian).

Model Name Using Similar Mecanism		TC-WR620/WR720
Tape Transport Mechanism Type	DECK A	TCM-190RA12A
	DECK B	TCM-190RB22A

SPECIFICATIONS

Recording system	4-track 2-channel stereo
Frequency response	(DOLBY NR OFF) 40 — 13,000 Hz (±3 dB), using TYPE I cassette (Sony HF-S) 40 — 14,000 Hz (±3 dB), using TYPE II cassette 40 — 15,000 Hz (±3 dB) using TYPE IV cassette
Wow and flutter	0.1% WRMS ±0.3% (DIN)
Inputs	PHONO (phono jacks): sensitivity 2.5 mV, impedance 47 kilohms DAT (phono jacks): sensitivity 450 mV, impedance 47 kiolhms VIDEO (phono jacks)(H3600 Model): sensitivity 300 mV, impedance 47 kilohms

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol ◻◻ are trademarks of Dolby Laboratories Licensing Corporation.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270℃ during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

MICROFILM

STEREO CASSETTE DECK

SONY®

TABLE OF CONTENTS

Section Title Page

1. GENERAL ······························ 3
2. MECHANICAL ADJUSTMENTS ·················· 4
3. ELECTRICAL ADJUSTMENTS ·················· 4

4. DIAGRAMS
    4-1. IC Pin Description ······················ 8
    4-2. Block Diagram ························ 12
    4-3. Printed Wiring Boards —Main Section— ··· 15
    4-4. Schematic Diagram —Main Section— ······ 19
    4-5. Schematic Diagram —Pin Jack Section— ······ 24
    4-6. Printed Wiring Boards —Pin Jack Section— ······ 29
    4-7. Semiconductor Lead Layouts ·············· 32
    4-8. Circuit Boards Location ················ 32

5. EXPLODED VIEWS
    5-1. Front Panel Section-1 ·················· 33
    5-2. Front Panel Section-2 ·················· 34
    5-3. Mechanism section-1 ··················· 35
    5-4. Mechanism section-2 ··················· 36

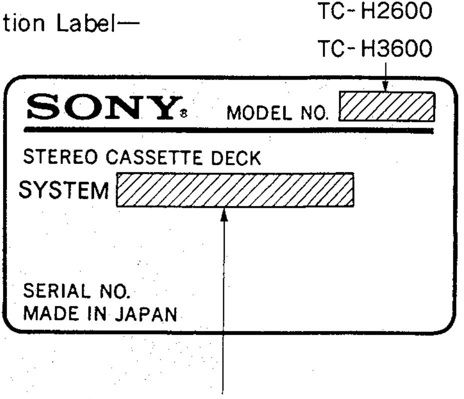
6. ELECTRICAL PARTS LIST ···················· 37

Caution when repairing

Normally the power of this set is supplied from the TA-H2600/H3600 amplifier connected. When only this set is repaired, connect the power of 18V AC as shown in the figure below.

MODEL IDENTIFICATION

—Specification Label—


TC-H2600
TC-H3600
SONY
MODEL NO.
STEREO CASSETTE DECK
SYSTEM
SERIAL NO.
MADE IN JAPAN

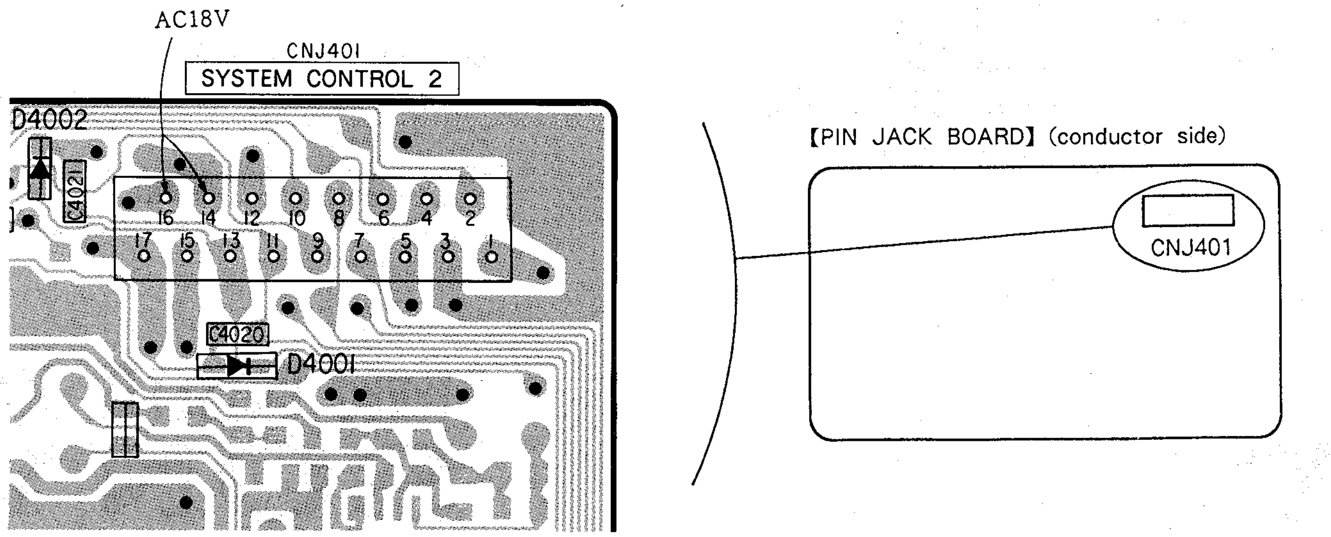
MHC-2600 (TC-H2600 : AEP, UK/
TC-H3600 : US, Canadian),
FH-E737CD (TC-H2600 : E, Australian),
MHC-3600 (TC-H3600 : AEP, UK, US, Canadian),
FH-E838CD (TC-H3600 : E, Australian).

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.


AC18V
CNJ401
SYSTEM CONTROL 2
D4002
C4021
16
14
12
10
8
6
4
2
17
15
13
11
9
7
5
3
1
C4020
D4001
【PIN JACK BOARD】 (conductor side)
CNJ401

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

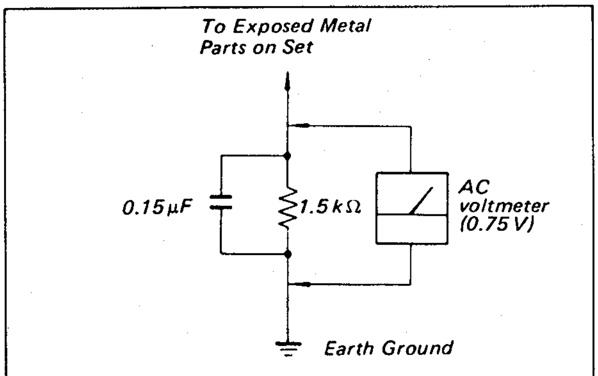
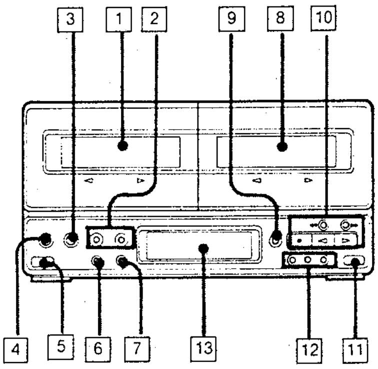


Fig. A. Using an AC voltmeter to check AC leakage.

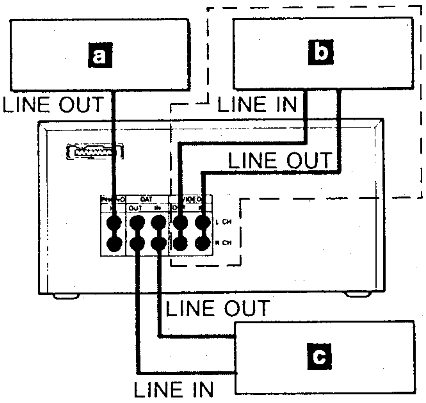
SECTION 1
GENERAL

This section is extracted from instraction manual.



[1] Cassette holder (Deck A)
[2] DECK A/B selector (64)
[3] CD SYNCHRO (CD synchronized recording) button and indicator (95) (102)
[4] DUBBING MODE button and indicator (84)
[5] ⏏ EJECT button (Deck A)
[6] DOLBY NR (Dolby Noise Reduction) switch (66) (80)
[7] DIRECTION MODE selector (64) (68)
[8] Cassette holder (Deck B)
[9] COUNTER RESET button
Resets the counter of the cassette deck to "0".
[10] Tape operation buttons (for Deck A and B)
◀◀ ▶▶ : Fast winding
■ : Stop
▷ : Forward play
◁ : Reverse play
[11] ⏏ EJECT button (Deck B)
[12] Tape operation buttons (for Deck B)
❚❚ : PAUSE
○ : MUTE (Muting)
● : REC (recording)
[13] Display window

TC-H3600 Model



You can connect a turntable system a to the PHONO jacks, a VCR b to the VIDEO jacks, and a DAT system c to the DAT jacks. To listen to each piece of equipment, press the FUNCTION buttons on the front panel until "PHONO" (for the turntable system), "VIDEO" (for VCR), or "DAT" appears on the display.

SECTION 2
MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured alcohol-moistened swab:

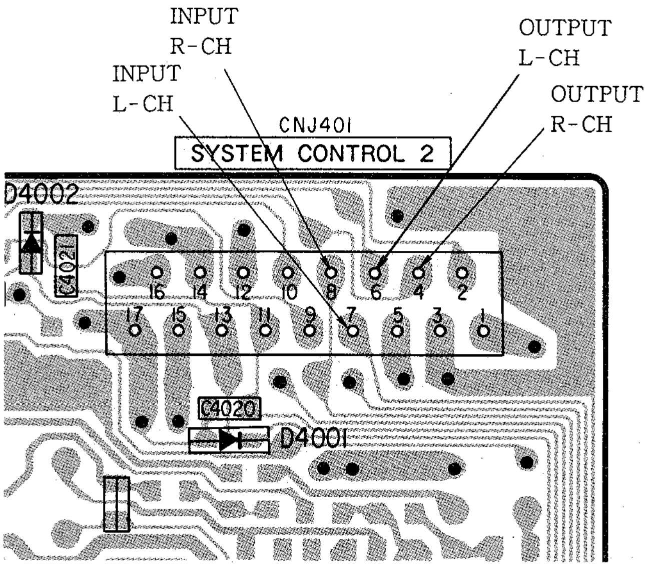
record/playback head	pinch roller
erase head	rubber belts
capstan	idlers

2. Demagnetize the record/playback head with a head demagnetizer.
   (Head demagnetizer do not approach for the erase head.)
3. Do not use a magnetized screwdriver for the adjustment.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be perfomed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Torque	Torque meter	Meter reading
Forward	CQ-102C	35 to 60g•cm (0.49 to 0.83 oz•inch)
Forward back tension	CQ-102C	2 to 6g • cm (0.03 to 0.08oz • inch)
Reverse	CQ-102RC	35 to 60g • cm (0.49 to 0.83oz • inch)
Reverse back tension	CQ-102RC	2 to 6g • cm (0.03 to 0.08oz • inch)
Forward, Reverse	CQ-201B	70 to 110g•cm (0.98 to 1.52 oz•inch)

LINE IN/OUT Terminal (CNJ401)



SECTION 3
ELECTRICAL ADJUSTMENTS

PRECAUTION

1. The adjustment should be performed in the publication. (Be sure to make playback adjustment at first.)
2. The adjustment and measurement should be performed for both L-CH and R-CH.

- Switch position
  DOLBY NR switch : OFF
  DIR MODE switch : ⇄

Test Tape

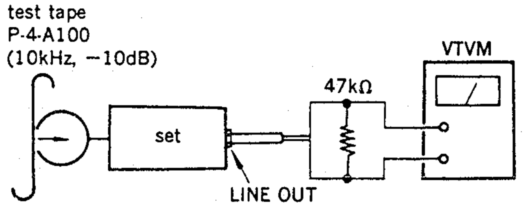
Tape	Contents	Use
P-4-A100	10kHz, −10dB	Azimuth Adjustment
P-4-L300	315Hz, 0dB	Level Adjustment
WS-48B	3kHz, 0dB	Tape Speed Adjustment

Record/Playback Head Azimuth Adjustment

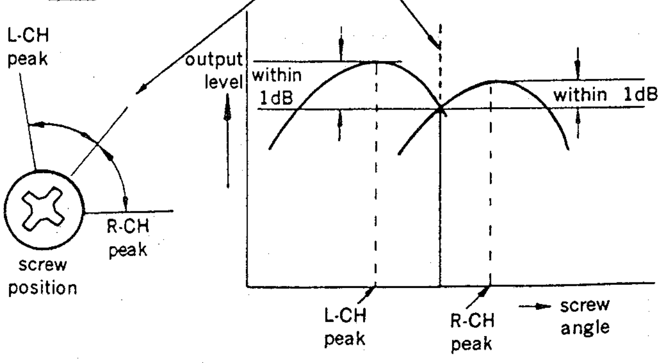
DECK A **DECK B**

Procedure:

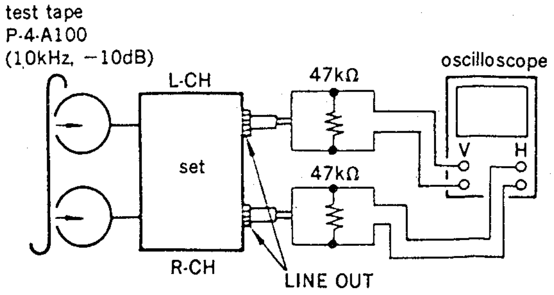
1. Forward Playback Mode

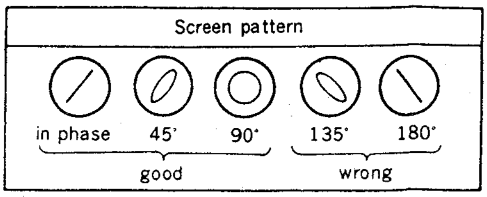


2. Turn the adjustment screw for the maximum output levels. If these levels do notmatch, turn the adjustment screw until both of output levels match together within 1dB.



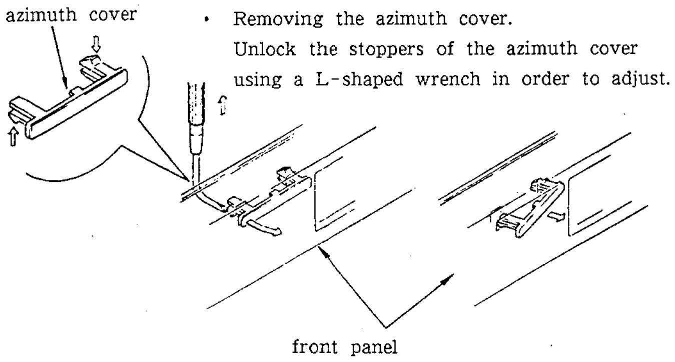
3. Playback Mode


test tape
P-4-A100
(1.0kHz, −10dB)
L-CH
set
R-CH
47kΩ
47kΩ
oscilloscope
V
H
LINE OUT

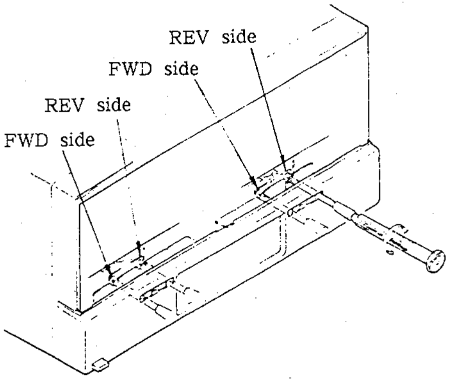

Screen pattern
in phase
45°
90°
135°
180°
good
wrong

4. Change the reverse playback mode and repeat the steps 1 to 3.
5. After the adjustment, lock the adjustment screw with suitable locking compound.

Adjustment Location : —record/playback head—


azimuth cover
front panel

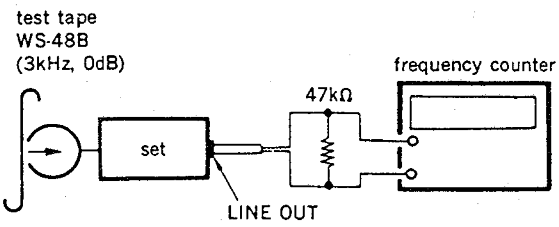
- Removing the azimuth cover.
  Unlock the stoppers of the azimuth cover using a L-shaped wrench in order to adjust.


REV side
FWD side
REV side
FWD side

Tape Speed Adjustment **DECK A** **DECK B**

Procedure :

—Forward Playback Mode—


test tape
WS-48B
(3kHz, 0dB)
set
47kΩ
frequency counter
LINE OUT

Perform high speed adjustment before normal speed adjustment.

(High speed adjustment)

1. Short TP601 (main board) when the power is OFF.
2. Turn on the power and put the deck A into the FWD mode.
3. Connect a resistor of 150 Ω to both the terminals of TP6001 (main board). (The set enters into high speed playback mode.)
4. Adjust RV72A (H) of the deck A so that a reading of the frequency counter meets the adjustment value.
5. Put the deck iA nto the STOP mode and remove the resister of 150 Ω
6. Adjust the deck B performing items 2 through 5 as deck A.
7. After the adjustment is completed, remove the short of TP601.

(Normal speed adjustment)

1. Put the set into the FWD playback mode.
2. At this time, adjust RV71A (L) of the deck A and RV71B (L) of the deck B so that a reading of the frequency counter meets the adjustment value.

Adjustment Limits :

Speed	Frequency Counter Reading
High	6,000 ± 20Hz
Normal	3,000 ± 10Hz

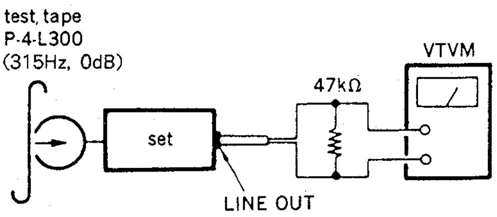
Frequency difference between the beginning and the end of the tape should be within 3%.
Frequency difference between deck A and deck B the beginning of the tape should be within 1.5%.

Adjustment Location : MD-A, B board

Playback Level Adjustment **DECK A** **DECK B**

Procedure :

—Forward Playback Mode—


test, tape
P-4-L300
(315Hz, 0dB)
set
47kΩ
VTVM
LINE OUT

Adjust deck A : RV11A (L-CH), RV21A R-CH) and deck B : RV11B (L-CH), RV21B (R-CH) so that the VTVM reading becomes the adjustment limits below.

Adjustment Limits :

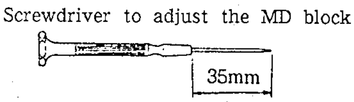
LINE OUT level : – 10 ± 0.5dB (0.23 to 0.26V)

Level Difference between Channels : within 0.5dB

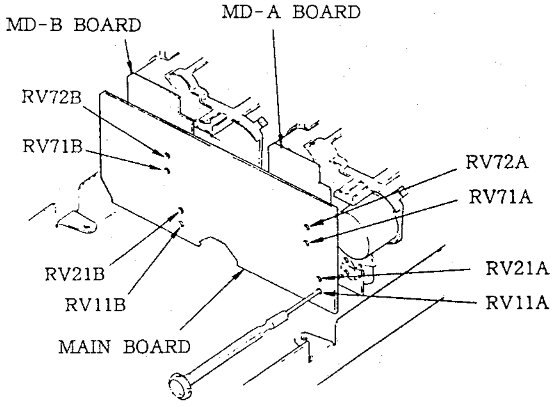
Confirm the LINE OUT level does not change in playback mode while changing the mode from playback to stop several times.

Adjustment Location : MD-A, B board

Tape Speed/playback Level Adjustment


Screwdriver to adjust the MD block
35mm

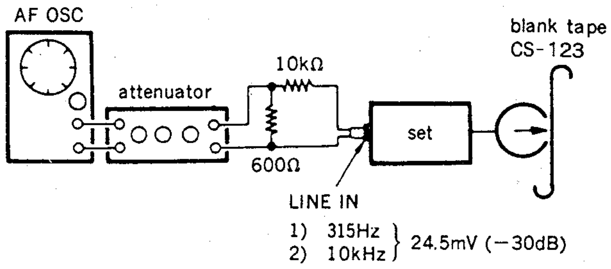
The MD block adjustment can be performed by inserting a screwdriver of which axis length (not including the shaft) is 35 mm or more through the rear side of the main board.


MD-B BOARD
MD-A BOARD
RV72B
RV71B
RV72A
RV71A
RV21A
RV11A
RV21B
RV11B
MAIN BOARD

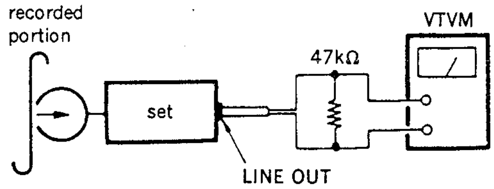
Record Bias Adjustment **DECK B**

Procedure :

1. Record Mode


AF OSC
attenuator
10kΩ
600Ω
LINE IN
set
blank tape
CS-123
1) 315Hz
2) 10kHz
24.5mV (–30dB)

2. Playback Mode


recorded
portion
set
47kΩ
VTVM
LINE OUT

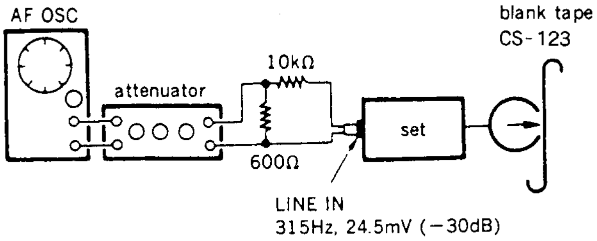
Playback the signal recorded in step 1.
Confirm that the 10kHz playback output is 0 ± 0.5dB relative to the 315Hz output. If necessary, adjust RV12 (L-CH), RV22 (R-CH) and repeat the steps given above.

Adjustment Location : MD-B board

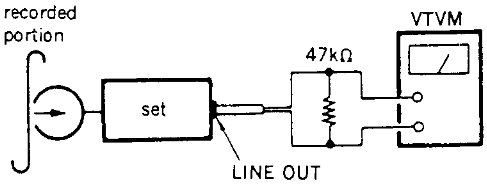
Record Level Adjustment **DECK B**

Procedure :

1. Record Mode


AF OSC
attenuator
10kΩ
600Ω
set
blank tape
CS-123
LINE IN
315Hz, 24.5mV (−30dB)

2. Playback Mode


recorded
portion
set
47kΩ
VTVM
LINE OUT

Confirm playback the tape recorded become adjustment level as follows.
If necessary, adjust RV101 (L-CH), RV201 (R-CH) and repeat steps 1 and 2.

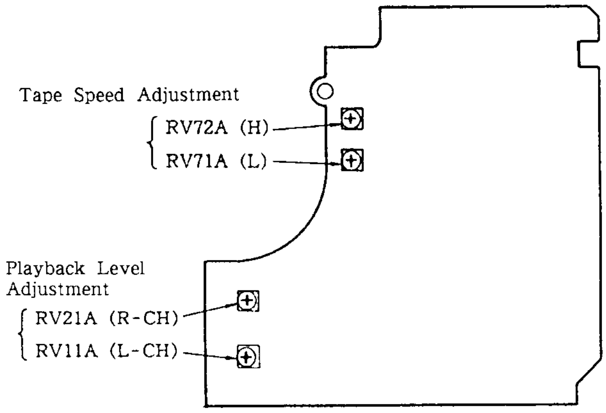
Adjustment Limits :

LINE OUT level : −30 ± 0.5dB (23 to 26mV)

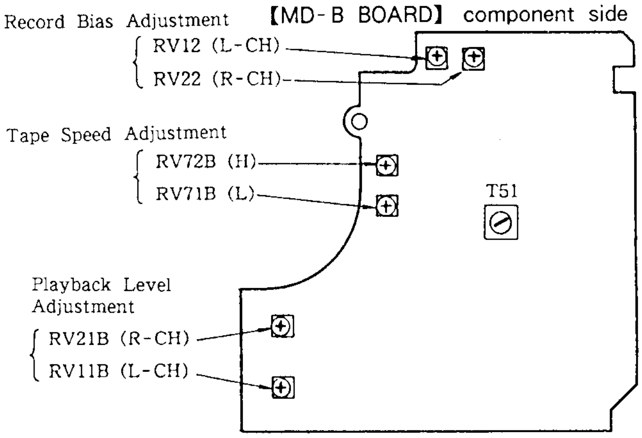
Adjustment Location : main board

ADJUSTMENT LOCATION :

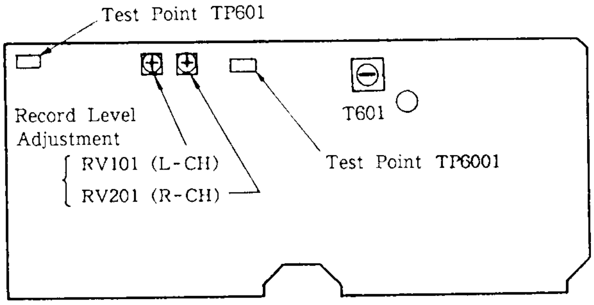
【MD-A BOARD】 component side


Tape Speed Adjustment
RV72A (H)
RV71A (L)
Playback Level
Adjustment
RV21A (R-CH)
RV11A (L-CH)

【MD-B BOARD】 component side


Record Bias Adjustment
RV12 (L-CH)
RV22 (R-CH)
Tape Speed Adjustment
RV72B (H)
RV71B (L)
T51
Playback Level
Adjustment
RV21B (R-CH)
RV11B (L-CH)

【MAIN BOARD】 component side


Test Point TP601
Record Level
Adjustment
RV101 (L-CH)
RV201 (R-CH)
T601
Test Point TP6001

SECTION 4
DIAGRAMS

4-1. IC PIN DESCRIPTION

IC351 display microprocessor HD614022FP

Fluorescent lamp indicator is activated by receiving data from IC601 (system controller).

Pin No.	Pin Name	I/O	Description
1～11	S10-S0	O	FL indicator tube(FL351) segment output
12			Not used. (+5.6 V)
13	VDISP	—	Power supply for activating the FL indicator tube(-20V)
14～15			Not used(GND)
16	SYNC	I	Interrupt input. Data transmission from IC601(system controller) is checked.
17	INT	I	Not used. (GND)
18～25		I	Not used. (GND)
26	Vcc	—	Power supply terminal (+5.6V)
27	CLK	I	Data transmission clock input from IC601 (system controller)
28	DATA	I	Serial data input from IC601 (system controller)
29	SYNC	I	Sync signal input which indicates the first byte of data sent from IC601 (system controller)
30～32			Not used. (GND)
33	HIGH DUB	O	LED (D301) light output in the high speed dubbing mode.
34	NORM DUB	O	LED (D301) light output in the normal speed dubbing mode.
35	CD SYNC	O	LED (D302) light output in the CD sync mode.
36～38			Not used. (GND)
39	FLCHECK	I	All the FL indicator tubes are lit when this port is set to "L". (Normally +5.6V)
40～42			Not used. (GND)
43	RESET	I	Reset input from IC601 (system controller). "L": Reset.
44	TEST	I	Not used. (+5.6V)
45	OSC1	I	Clock input (4.19MHz)
46	OSC2	O	Clock output
47	GND	—	Power supply terminal (GND)
48～50			Not used. (GND)
51			Not used. (Pull-up)
52～57	G0 - G6	O	FL indicator tube (FL351) grid output
58～61			Not used. (+5.6V)
62～64	S11 - S13	O	FL indicator tube (FL351) segment output

IC406 selector controller M50760-315FP

AV output is switched with the audio pass signal sent from the amplifier (TA-H2600/H3600).

Pin No.	Pin Name	I/O	Description
1	D3	I	Model secection input port. Connected to GND.
2	A0	O	Audio IN switch (IC403 and IC404) control output port.
3			Not used.
4	A1	O	Audio IN switch (IC403 and IC404) control output port.
5	CNVss	—	Power supply terminal (GND)
6	Vss	—	Power supply terminal (GND)
7	A2	O	Audio IN switch (IC403 and IC404) control output port.
8	B0	O	Audio OUT switch (IC405) control output port.
9	B1	O	Audio OUT switch (IC405) control output port.
10			Not used.
11	V0	O	Video IN/OUT switch (IC407) control output port.
12	V1	O	Video IN/OUT switch (IC407) control output port.
13～14			Not used. (GND)
15			Not used.
16	RESET	I	Reset input. "L": Reset
17	XOUT	O	Clock output.
18	XIN	I	Clock input.
19	S	I	Serial data input (audio pass)
20	D2	I	Serial data input (audio pass)
21	S1	I	Model secection input port. Connected to GND.
22			Not used.
23	VD0	I	Model secection input port. Connected to GND.
24	V_{DD}	—	Power supply terminal (+5V)

IC601 system controller M50944-121FP

The system is wholly controlled by communication between IC351 (display microprocessor) and IC602 (mechanism controller).

Pin No.	Pin Name	I/O	Description
1	KEY2	I	Not used. (GND)
2	KEY1	I	Not used. (GND)
3	SYNC	O	Sync signal input which indicates the first byte of data sent to IC351 (display microprocessor).
4	FL-SCK	O	Data transmission clock output to IC351 (display microprocessor).
5	FL-SO	O	Serial data output to IC351 (display microprocessor).
6	AU-BUS	O	Audio pass output.
7	AU-BUS	I	Audio pass input (negative edge).
8	POWER-IN	I	Power-off detection input. "L": Power OFF.
9	PB-SELECT	O	Deck A/B switch output in the playback mode. "L": deck B, "H": deck A.
10	AMS-SELECT	O	AMS amplifier input switch output
11	MD-REQ	I	Data request input from IC602 (mechanism controller)
12	MD-SCLK	O	Data transmission clock output to IC602 (mechanism controller)
13	MD-SO	O	Serial data output to IC602 (mechanism controller)
14	MD-SI	I	Serial data input from IC602 (mechanism controller)
15		O	Not used. (GND)
16	RESET (MD)	O	IC602 (mechanism controller) reset signal output.
17	AU-BUS	I	Audio pass input (positive-edge)
18	RESET (DSP)	O	IC351 (display microprocessor) reset signal output.
19	GND	—	Power supply terminal. (GND)
20	RESET	I	System reset input. "L": Reset.
21	X-IN	I	Clock input (4MHz)
22	X-OUT	O	Clock output
23	XC-IN	I	Not used. (GND)
24	XC-OUT	O	Not used. (open)
25	VSS	—	Power supply terminal (GND)
26	N. C.		Not used. (open)
27	TEST	I	Electrical adjustment test mode setting input This set enters into the test mode when the power is on and it is se to "L". *1
28	VAR SELECT	I	Not used. (pull-up)
29	METAL (B)	I	Metal switch (S83) input for deck B. "H": Metal.
30	70μ (B)	I	Chrome switch (S82) input for deck B. "L": Normal
31	PPOWER-ON	O	Not used. (open)
32~35			Not used. (GND)
36	70μ (A)	I	Chrome switch (S83) input for deck A. "L": Normal.
37	AMS IN	I	Signal input from the AMS amplifier. "H": Detected, "L": Not detected.
38	N. C.		Not used. (GND)
39			Not used. (GND)
40	EQ-HIGH	O	REC equalizer characteristic switch output "H": High speed, "L": Normal speed.
41	BIAS FADE	O	Not used. (GND)
42	BIAS (B)	O	Bias ON/OFF switch output. "H": OFF, "L": ON.
43	TYPE Ⅱ (B)	O	Not used. (GND)
44	TYPE Ⅰ (B)	O	Not used. (GND)
45	R.MUTE (B)	O	REC mute control output. "L": Mute ON, "H": Mute OFF.
46	RELAY (B)	O	Mechanism deck head switch control output. "L": ON.
47	DOLBY B	O	Dolby B/C switch control output. "L": Dolby C, "H": Dolby B.
48	DOLBY ON	O	Dolby ON/OFF switch control output. "L": ON, "H": OFF.
49	REC/PB	O	Dolby amplifier REC/PB swith output. "L": REC, "H": PB.
50		O	Not used. (open)
51	PB 70μ	O	Playback equalizer characteristic switch output. "H": normal, "L": chrome metal
52	AMS/BS	O	Not used.
53	PASS	O	PASS amplifier switch output for LINE OUT. "L": PASS amplifier, "H": Through.

Pin No.	Pin Name	I/O	Description
54	LINE-MUTE	O	Line mute control output. "L": MUTE OFF, "H": MUTE ON
55	AVCC	—	Power supply terminal. (+5V)
56	VCC	—	Power supply terminal. (+5V)
57	AVSS	—	Power supply terminal (GND)
58	V.REF	I	Reference voltage input for A/D input port (+5 V)
59	METER (R)	I	Level meter signal output (R-CH)
60	METER (L)	I	Level meter signal input (L-CH)
61	VOL DATA	I	Not used. (GND)
62	KEY5	I	Not used. (GND)
63	KEY4	I	Key input. (analog) *2
64	KEY3	I	Key input. (analog) *2

*1 Test mode
When the power is on and pin ㉗ is set to "L" (TP601 is shortened.), the set enters the electrical adjustment test mode and the followings can be available.

(1) High speed playback
When A or B deck is in the playback mode and a resistor of 150 Ω is connected to both the terminals of TP6001 (main board), the set can be entered the high speed playback mode.

(2) Source monitor
Recording signals can be monitored through the LINE OUT terminal (see page 4) because the line short is removed in recording.

(3) Recording memory
Recording memory is set to ON when the tape counter is reset at the record start point.

(4) Mode display
The counter displays as shown in the A figure when the counter mode is set to the deck A and the deck A button of deck A/B switch is pressed, or when the counter mode is the B deck and the B deck button is pressed.

(5) When this terminal is set back to "H" after it is set to the test mode in "L" of the power-on mode, all the FL indicator tubes are lit.
(The mechanism block continues to operate as before it is set to "H".)

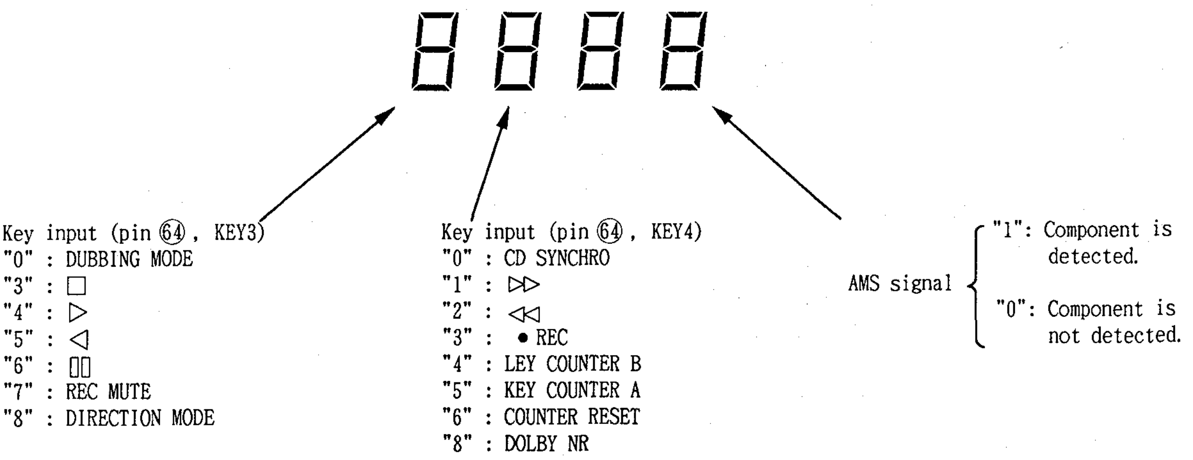

Key input (pin (64), KEY3)
"0" : DUBBING MODE
"3" : □
"4" : ▷
"5" : ◁
"6" : ▯▯
"7" : REC MUTE
"8" : DIRECTION MODE
Key input (pin (64), KEY4)
"0" : CD SYNCHRO
"1" : ▷▷
"2" : ◁◁
"3" : ● REC
"4" : LEY COUNTER B
"5" : KEY COUNTER A
"6" : COUNTER RESET
"8" : DOLBY NR
AMS signal
"1": Component is detected.
"0": Component is not detected.

Figure A

*2 Key input (analog port)

Voltage(V) / Input port	0	0.3	0.7	1.2	1.7	2.3	2.8	3.3	4.0
Pin (63), KEY4	CD SYNCHRO	◁◁	▷▷	● REC	KEY COUNTER B	KEY COUNTER A	COUNTER RESET		DOLBY NR
Pin (64), KEY3	DUBBING MODE			□	▷	◁	▯▯ PAUSE	○ REC MUTE	DIRECTION MODE

IC602 mechanism controller M50925-482FP

The mechanism deck is controlled by receiving data from IC601 (system controller).

Pin No.	Pin Name	I/O	Description
1	RESET	I	Reset input from IC601 (system controller). "L": Reset.
2	STOP-A	I	Deck A stop switch (S81) input. "H": Stop.
3	AVSS	—	Power supply terminal (GND)
4	Vref	I	A/D inpout port reference voltage input.
5	A/D. IN-B	I	Deck B leaf switch input (analog). *1
6	A/D. IN-A	I	Deck A leaf switch input (analog). *1
7	AVDD	—	Power supply terminal. (+5V)
8	N. C.		
9	T. REEL-B	I	Not used. (GND)
10	S. REEL-B	I	Deck B supply reel table sensor (IC81)
11	T. REEL-A	I	Not used. (GND)
12	S. REEL-A	I	Deck A supply reel table sensor (IC81)
13~14	N. C.		
15	CM. ON-A	O	Deck A capstan motor (M102) ON/OFF control output. "L": OFF, "H": ON.
16	CM. ON-B	O	Deck B capstan motor (M102) ON/OFF control output. "L": OFF, "H": ON.
17	GND	—	Power supply terminal. (GND)
18	VSS	—	Power supply terminal. (GND)
19	CM. H/L	O	Capstan motor (M102) speed switch output. "H": High speed, "L": Normal.
20	FWD-B	O	Deck B reel motor control output. *2 The reel motor is activated by combining these three outputs.
21	TRIG-B	O	
22	FWD-B	O	
23	RWD-A	O	Deck A reel motor control output. *2 The reel motor is activated by combining these three outputs.
24	TRIG-A	O	
25	FWD-A	O	
26	N. C.		
27	S. REQ	O	Data request output to IC601 (system controller).
28	S. CLK	I	Data transmission clock input from IC601 (system controller).
29	S. OUT	O	Serial data output to IC601 (system controller).
30	S.IN	I	Serial data input from IC601 (system controller).
31~32	N. C.		
33	XOUT	O	Clock output.
34	XIN	I	Clock input.
35	STOP-B	I	Deck B stop switch (S81) input. "H": Stop.
36	VDD	—	Power supply terminal. (+5V)

*1 HALF, REC safety tab leaf switch input

Leaf switch \ Voltage		1	1.9	2.8	3.9	5
Half	S86	ON				OFF
REC safety tab, side A	S84	OFF	ON	OFF	ON	OFF
REC safety tab, side B	S85	ON	ON	OFF	OFF	OFF
		REC availablefor only side B.	REC availablefor both sides	REC inhibit for both sides A and B.	REC availablefor only side A.	Tape is not set.

Tape is set.

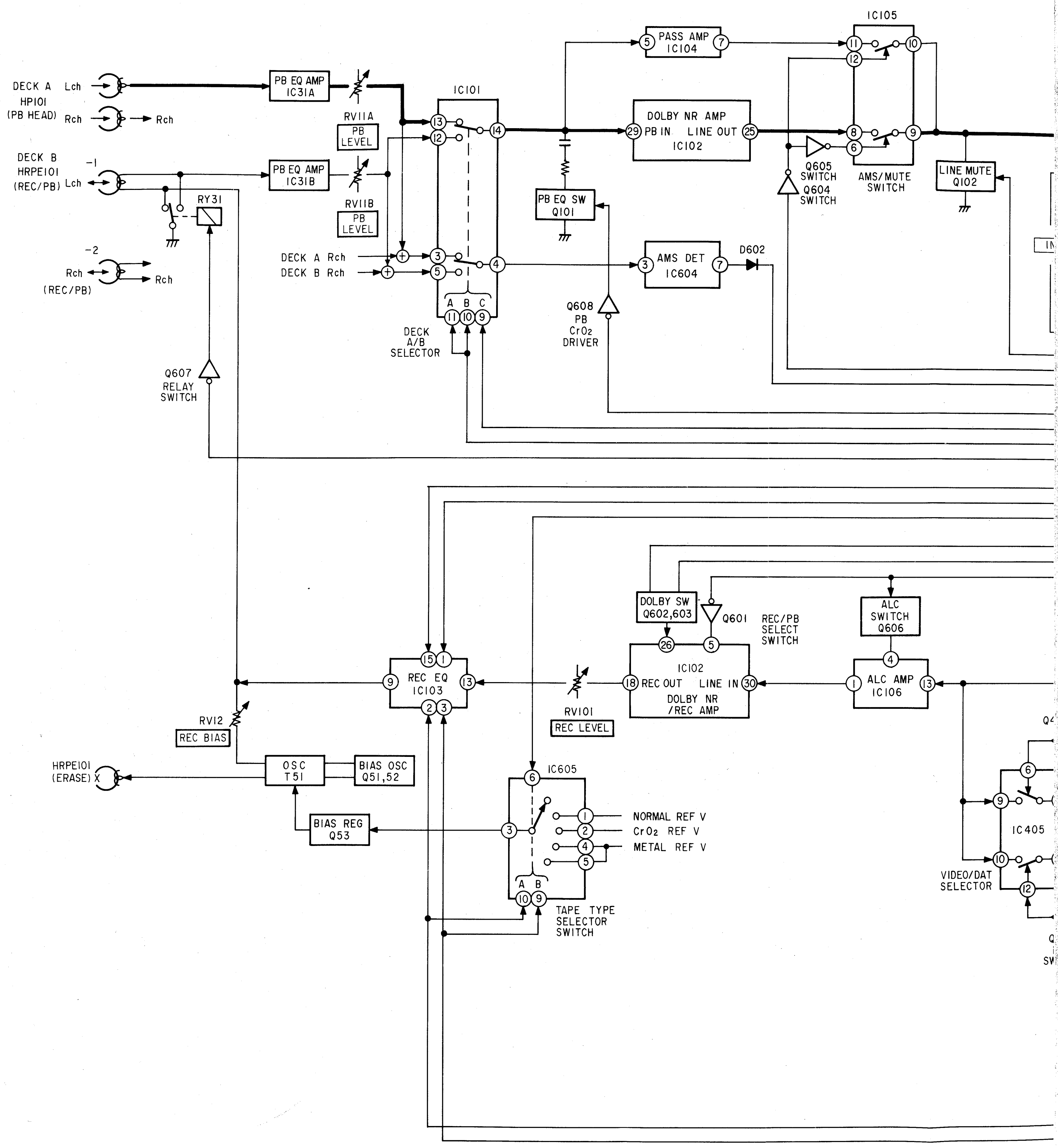
*2 Reel motor drive

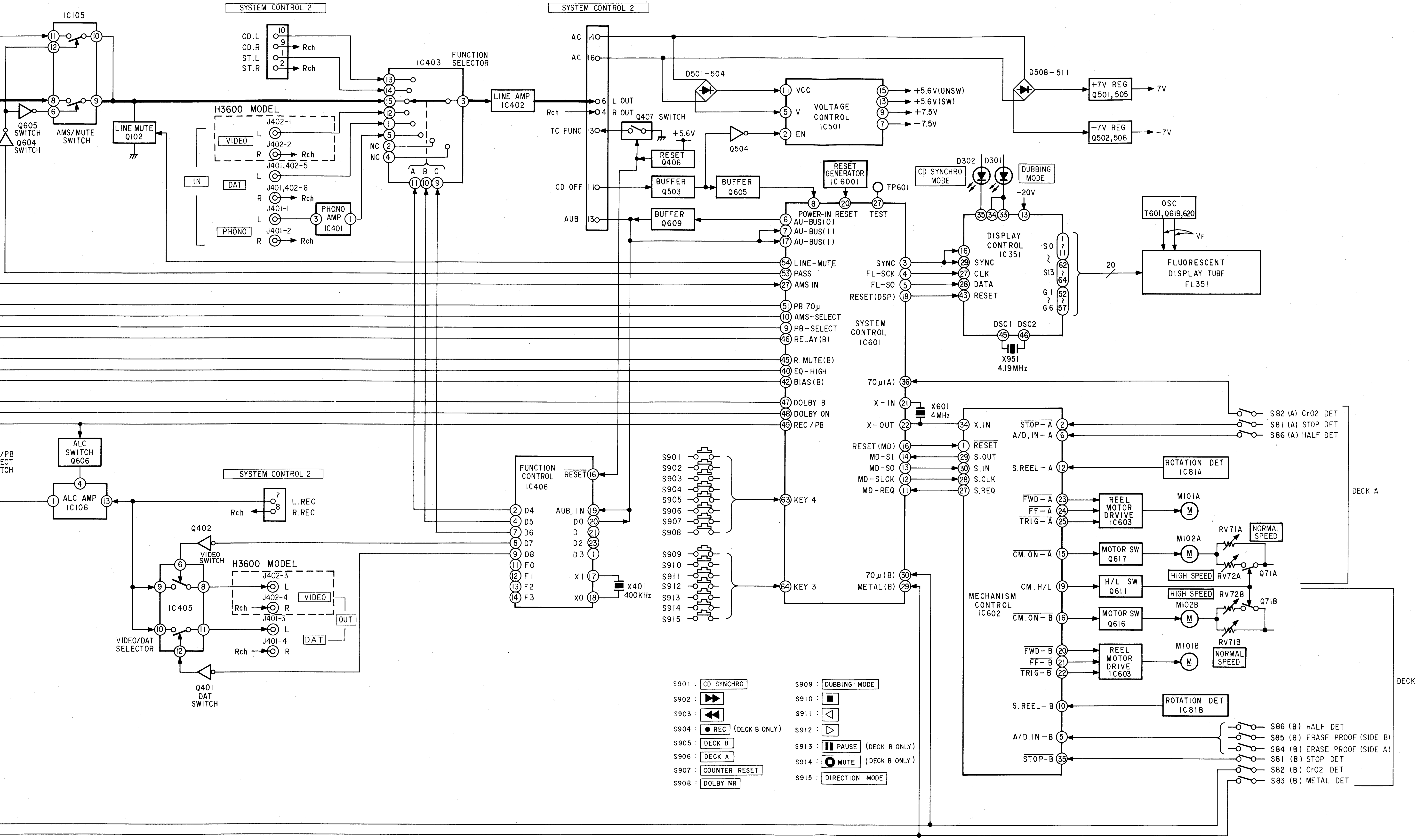
Output port \ Mode		FF	TRIG (kick)	STOP	FWO
Pins ㉑and㉔	FF	L	H	L	L
Pins ㉒and㉕	TRIG	H	L	L	H
Pins ⑳and㉓	FWD	H	H	L	L

Reel motor drive amplifier output voltage

Output	Voltage
TRIG	+6V
FF. REW	−5V
FWD	−3V

4-2. BLOCK DIAGRAM

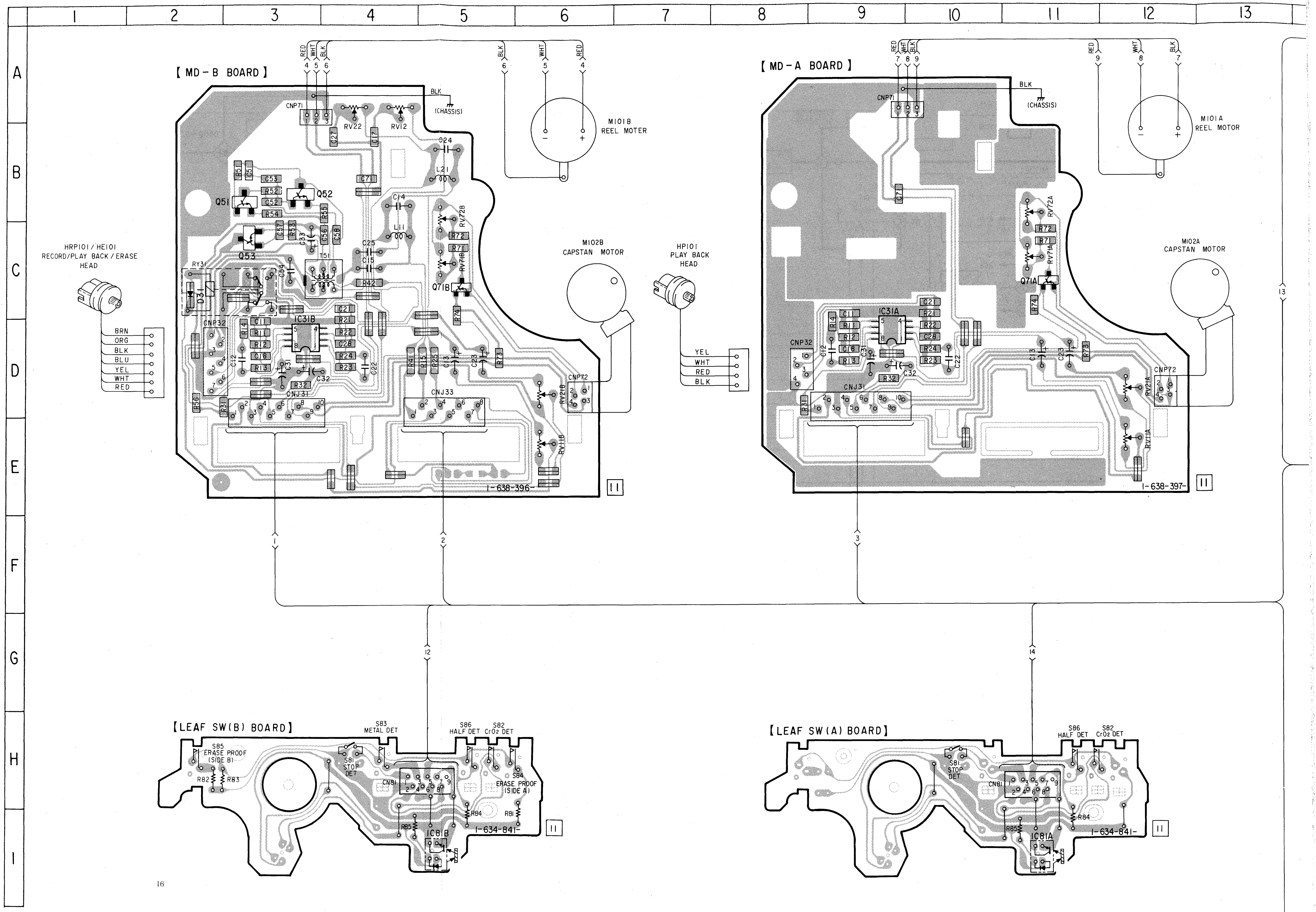

DECK A Lch
HP101
(PB HEAD) Rch
Rch
DECK B -1
HRPE101
(REC/PB) Lch
RY31
-2
Rch
Rch
(REC/PB)
PB EQ AMP IC31A
PB EQ AMP IC31B
RV11A PB LEVEL
RV11B PB LEVEL
IC101
DECK A Rch
DECK B Rch
A B C
DECK A/B SELECTOR
Q607 RELAY SWITCH
PASS AMP IC104
DOLBY NR AMP PB IN LINE OUT IC102
PB EQ SW Q101
AMS DET IC604
D602
Q608 PB CrO2 DRIVER
IC105
Q605 SWITCH
Q604 SWITCH
AMS/MUTE SWITCH
LINE MUTE Q102
DOLBY SW Q602,603
Q601
REC/PB SELECT SWITCH
IC102 REC OUT LINE IN DOLBY NR /REC AMP
ALC SWITCH Q606
ALC AMP IC106
REC EQ IC103
RV101 REC LEVEL
RV12 REC BIAS
HRPE101 (ERASE)
OSC T51
BIAS OSC Q51,52
BIAS REG Q53
IC605
NORMAL REF V
CrO2 REF V
METAL REF V
A B
TAPE TYPE SELECTOR SWITCH
IC405
VIDEO/DAT SELECTOR


IC105
Q605 SWITCH
Q604 SWITCH
AMS/MUTE SWITCH
LINE MUTE Q102
SYSTEM CONTROL 2
CD.L
CD.R
ST.L
ST.R
Rch
H3600 MODEL
VIDEO
J402-1
J402-2
J401,402-5
J401,402-6
J401-1
J401-2
IN
DAT
PHONO
PHONO AMP IC401
IC403 FUNCTION SELECTOR
NC
A B C
LINE AMP IC402
AC
L OUT
R OUT
TC FUNC
CD OFF
AUB
Q407 SWITCH
+5.6V
RESET Q406
BUFFER Q503
BUFFER Q605
BUFFER Q609
Q504
D501-504
VCC
V
EN
VOLTAGE CONTROL IC501
+5.6V(UNSW)
+5.6V(SW)
+7.5V
−7.5V
D508-511
+7V REG Q501,505
7V
−7V REG Q502,506
−7V
RESET GENERATOR IC6001
TP601
POWER-IN RESET
TEST
AU-BUS(0)
AU-BUS(1)
AU-BUS(1)
LINE-MUTE
PASS
AMS IN
PB 70μ
AMS-SELECT
PB-SELECT
RELAY(B)
R.MUTE(B)
EQ-HIGH
BIAS(B)
DOLBY B
DOLBY ON
REC/PB
KEY 4
KEY 3
SYSTEM CONTROL IC601
SYNC
FL-SCK
FL-SO
RESET(DSP)
70μ(A)
X-IN
X-OUT
X601 4MHz
RESET(MD)
MD-SI
MD-SO
MD-SCK
MD-REQ
70μ(B)
METAL(B)
D302
D301
CD SYNCHRO MODE
DUBBING MODE
−20V
DISPLAY CONTROL IC351
SYNC
CLK
DATA
RESET
S0
S13
G1
G6
DSC1 DSC2
X951 4.19MHz
OSC T601,Q619,620
VF
20
FLUORESCENT DISPLAY TUBE FL351
/PB
ECT
TCH
ALC SWITCH Q606
ALC AMP IC106
L.REC
R.REC
Q402
VIDEO SWITCH
H3600 MODEL
J402-3
J402-4
J401-3
J401-4
VIDEO
OUT
DAT
IC405
VIDEO/DAT SELECTOR
Q401 DAT SWITCH
FUNCTION CONTROL IC406
RESET
D4
D5
D6
D7
D8
F0
F1
F2
F3
AUB IN
D0
D1
D2
D3
X1
X0
X401 400KHz
S901
S902
S903
S904
S905
S906
S907
S908
S909
S910
S911
S912
S913
S914
S915
X.IN
RESET
S.OUT
S.IN
S.CLK
S.REQ
MECHANISM CONTROL IC602
STOP-A
A/D.IN-A
S.REEL-A
FWD-A
FF-A
TRIG-A
CM.ON-A
CM.H/L
CM.ON-B
FWD-B
FF-B
TRIG-B
S.REEL-B
A/D.IN-B
STOP-B
ROTATION DET IC81A
REEL MOTOR DRVIVE IC603
M101A
MOTOR SW Q617
M102A
H/L SW Q611
MOTOR SW Q616
M102B
REEL MOTOR DRIVE IC603
M101B
ROTATION DET IC81B
RV71A
NORMAL SPEED
HIGH SPEED
RV72A
Q71A
HIGH SPEED
RV72B
Q71B
RV71B
NORMAL SPEED
S82 (A) CrO2 DET
S81 (A) STOP DET
S86 (A) HALF DET
DECK A
DECK B
S86 (B) HALF DET
S85 (B) ERASE PROOF (SIDE B)
S84 (B) ERASE PROOF (SIDE A)
S81 (B) STOP DET
S82 (B) CrO2 DET
S83 (B) METAL DET
S901 : CD SYNCHRO
S902 : ▶▶
S903 : ◀◀
S904 : ● REC (DECK B ONLY)
S905 : DECK B
S906 : DECK A
S907 : COUNTER RESET
S908 : DOLBY NR
S909 : DUBBING MODE
S910 : ■
S911 : ◁
S912 : ▷
S913 : ❚❚ PAUSE (DECK B ONLY)
S914 : MUTE (DECK B ONLY)
S915 : DIRECTION MODE

4-3. PRINTED WIRING BOARDS – MAIN SECTION – • See page 32 for Semiconductor Lead Layouts and Curcuit Boards Location.

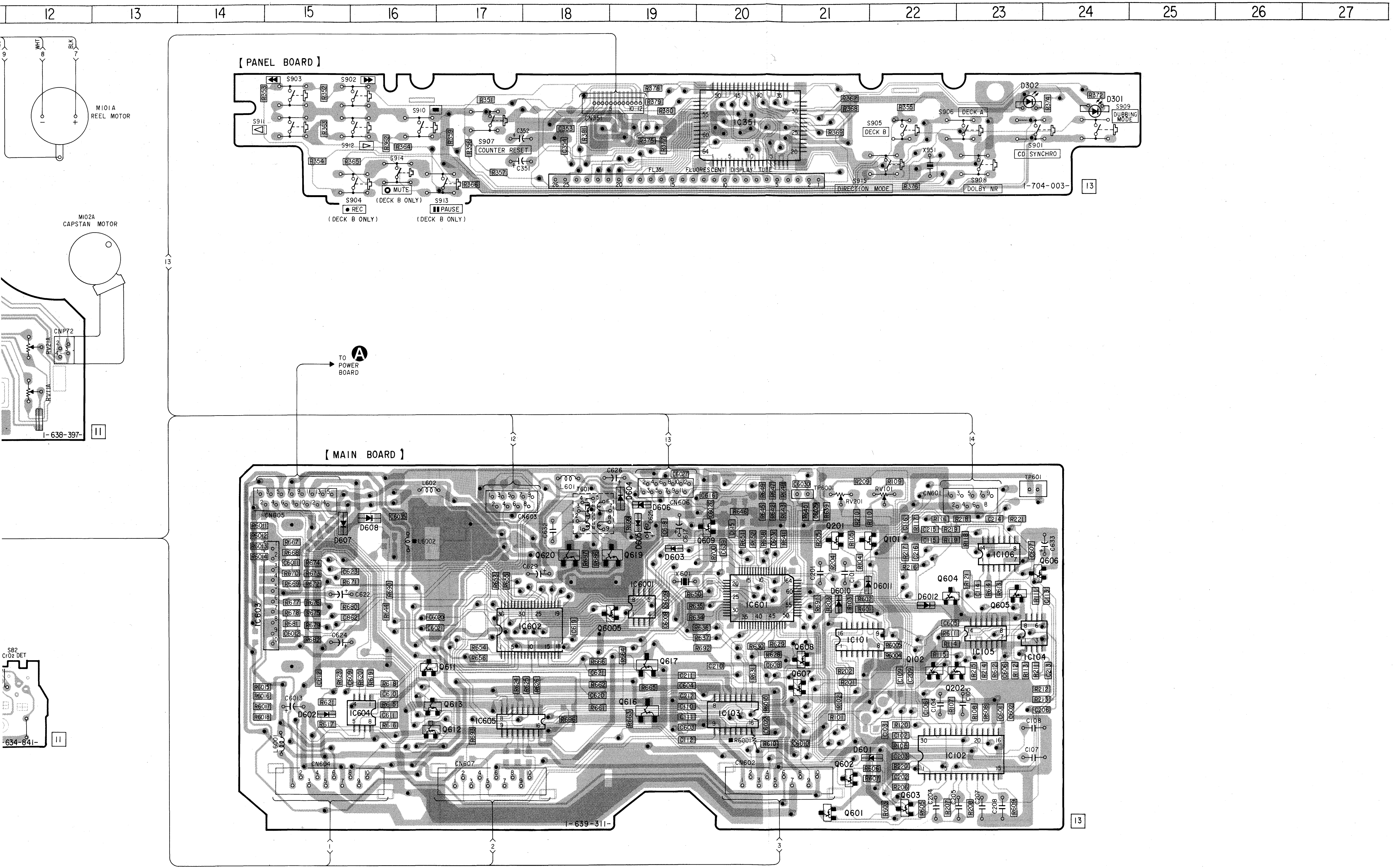
- Semiconductor Location

Ref. No.	Location
D31	C-2
D301	B-24
D302	A-23
D601	I-21
D602	I-15
D603	G-19
D604	F-19
D605	F-19
D606	F-19
D607	F-15
D608	F-16
D6010	G-21
D6011	G-21
D6012	G-22
IC31-A	D-9
IC31-B	D-3
IC81-A	I-11
IC81-B	I-5
IC101	H-21
IC102	I-23
IC103	I-20
IC104	H-23
IC105	H-23
IC106	G-23
IC351	B-20
IC601	G-20
IC602	H-18
IC603	G-15
IC604	I-16
IC605	I-17
IC6001	G-19
Q51	B-3
Q52	B-3
Q53	C-3
Q71-A	C-11
Q71-B	C-5
Q101	G-21
Q102	H-22
Q201	G-21
Q202	H-22
Q601	J-21
Q602	I-21
Q603	J-22
Q604	G-22
Q605	G-23
Q606	G-23
Q607	H-21
Q608	H-21
Q609	F-20
Q611	H-16
Q612	I-16
Q613	H-16
Q616	I-19
Q617	H-19
Q619	G-19
Q620	G-18
Q6005	G-19

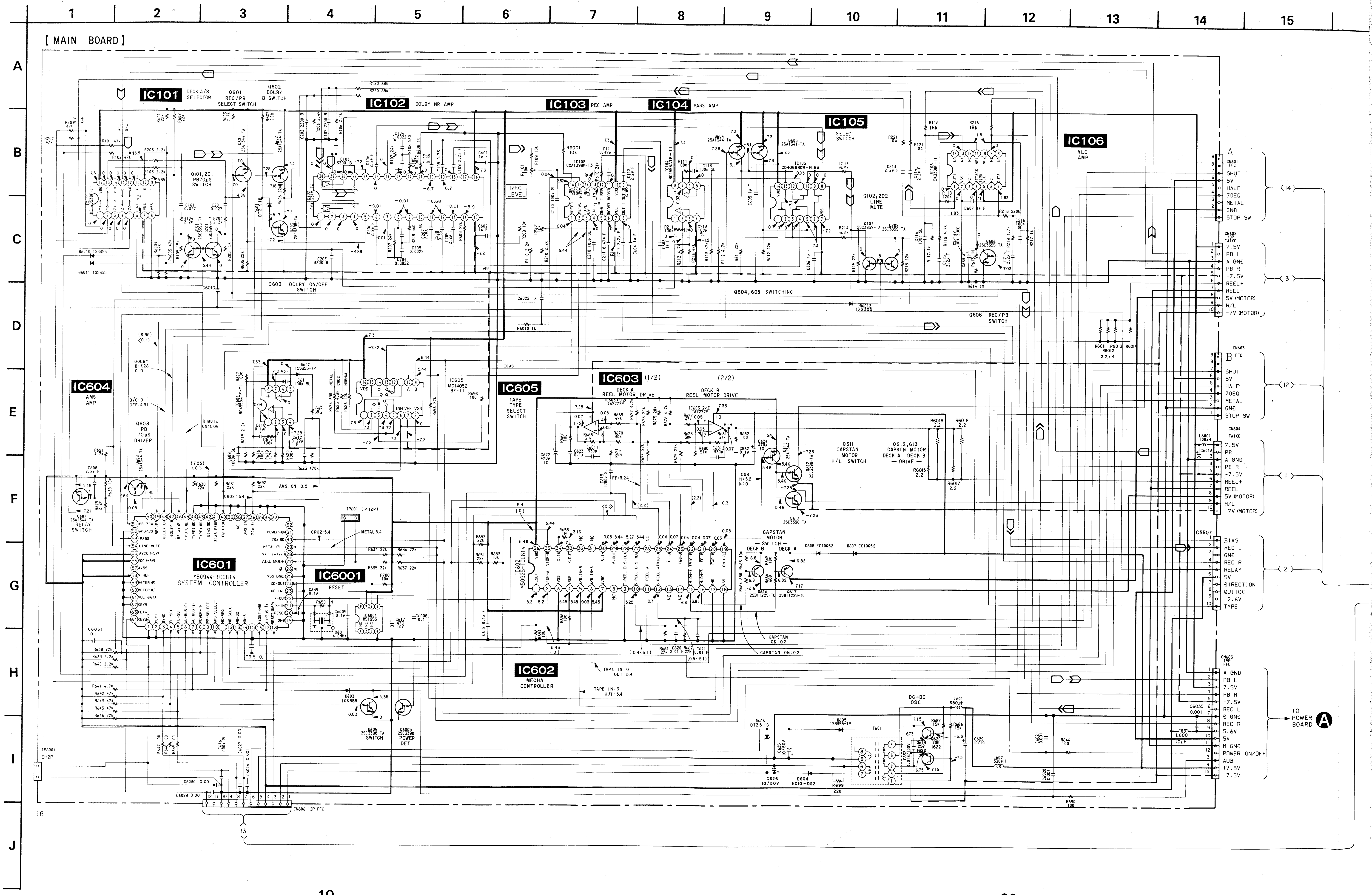

1
2
3
4
5
6
7
8
9
10
11
12
13
A
B
C
D
E
F
G
H
I
【MD-B BOARD】
RED
WHT
BLK
CNP71
RV22
RV12
(CHASSIS)
M101B
REEL MOTER
C24
L21
C71
C14
L11
RV72B
R72
R71
RV71B
Q71B
R74
R73
Q51
Q52
Q53
T51
C25
C15
R42
IC31B
CNP32
CNJ31
CNJ33
CNP72
RV21B
RV11B
1-638-396-
M102B
CAPSTAN MOTOR
HRP101 / HE101
RECORD/PLAY BACK / ERASE HEAD
RY31
D31
BRN
ORG
BLK
BLU
YEL
WHT
RED
HP101
PLAY BACK HEAD
YEL
WHT
RED
BLK
【MD-A BOARD】
M101A
REEL MOTOR
M102A
CAPSTAN MOTOR
RV72A
RV71A
Q71A
IC31A
CNP32
CNJ31
CNP72
RV21A
RV11A
1-638-397-
II
【LEAF SW(B) BOARD】
S83
METAL DET
S86
HALF DET
S82
CrO2 DET
S85
ERASE PROOF
(SIDE B)
R82
R83
S81
STOP
DET
CN81
S84
ERASE PROOF
(SIDE A)
R84
R81
R85
IC81B
1-634-841-
【LEAF SW(A) BOARD】
IC81A
12
14

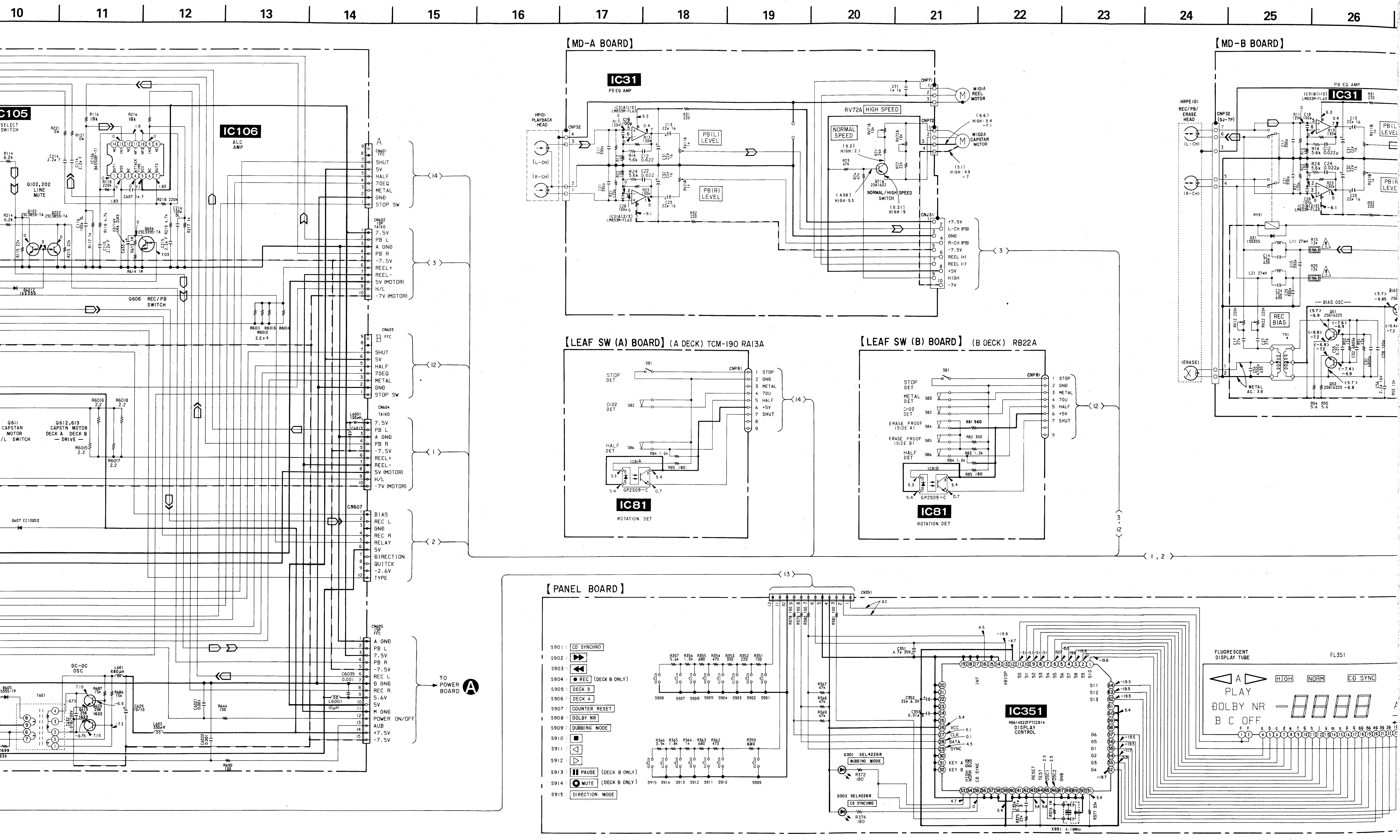
Note on Mounting Diagram:

- o—— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- ● : Through hole.
- ▨ : Pattern on the side which is seen.
- ▨ : Pattern of the rear side.

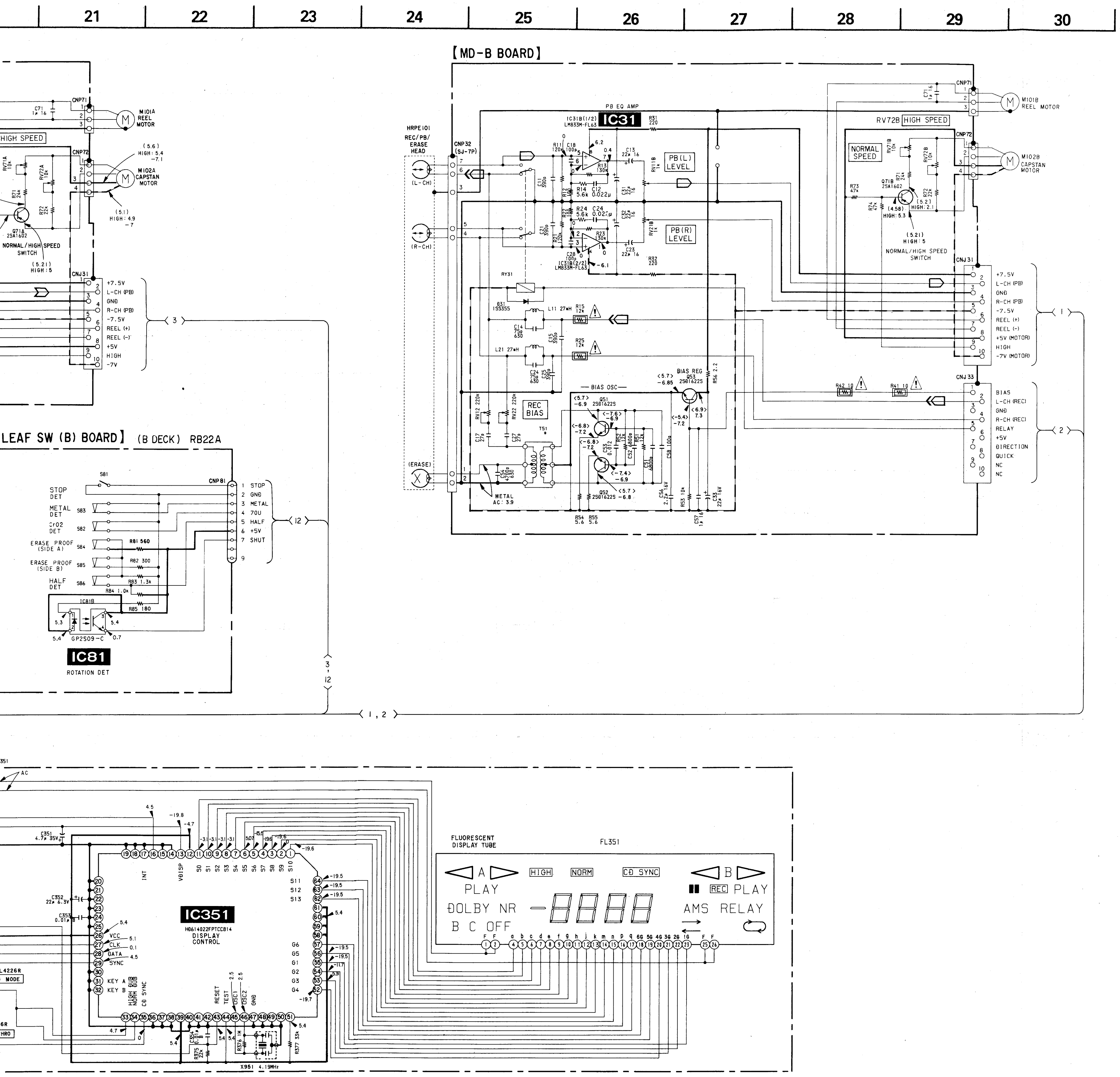

12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
WHT
BLK
M101A
REEL MOTOR
M102A
CAPSTAN MOTOR
CNP72
RV21A
RV11A
1-638-397-
11
S82
CrO2 DET
-634-841-
11
[PANEL BOARD]
S903
S902
S911
S910
S912
S914
S907
COUNTER RESET
C352
C351
S904
● REC
(DECK B ONLY)
MUTE
(DECK B ONLY)
S913
▮▮PAUSE
(DECK B ONLY)
CN351
IC351
FL351
FLUORESCENT DISPLAY TUBE
S905
DECK B
S906
DECK A
X951
S915
DIRECTION MODE
S908
DOLBY NR
D302
D301
S909
DUBBING MODE
S901
CD SYNCHRO
1-704-003-
13
TO A POWER BOARD
[MAIN BOARD]
CN605
CN603
CN606
CN601
TP601
TP6001
RV101
RV201
IC603
IC602
IC6001
IC601
IC106
IC101
IC105
IC104
IC604
IC605
IC103
IC102
Q620
Q619
Q609
Q201
Q101
Q604
Q606
Q605
Q6005
Q611
Q613
Q612
Q617
Q616
Q608
Q607
Q102
Q202
Q602
Q603
Q601
D607
D608
D604
D606
D605
D603
D6010
D6011
D6012
D602
D601
L602
L601
L6002
L6001
T601
X601
CN604
CN607
CN602
1-639-311-
13
1
2
3
12
13
14

4-4. SCHEMATIC DIAGRAM – MAIN SECTION – • See page 24 for Note in Schematic Diagram.


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
A B C D E F G H I J
[MAIN BOARD]
IC101 DECK A/B SELECTOR
Q601 REC/PB SELECT SWITCH
Q602 DOLBY B SWITCH
IC102 DOLBY NR AMP
IC103 REC AMP
IC104 PASS AMP
IC105 SELECT SWITCH
IC106 ALC AMP
Q101,201 PB70μS SWITCH
REC LEVEL
Q102,202 LINE MUTE
Q603 DOLBY ON/OFF SWITCH
Q604,605 SWITCHING
Q606 REC/PB SWITCH
IC604 AMS AMP
Q608 PB 70μS DRIVER
Q607 2SA1344-TA RELAY SWITCH
IC605 TAPE TYPE SELECT SWITCH
IC603 (1/2) DECK A REEL MOTOR DRIVE
(2/2) DECK B REEL MOTOR DRIVE
Q611 CAPSTAN MOTOR H/L SWITCH
Q612,613 CAPSTAN MOTOR DECK A DECK B – DRIVE –
CAPSTAN MOTOR SWITCH DECK B DECK A
IC601 M50944-TCC814 SYSTEM CONTROLLER
IC6001 RESET
IC602 MECHA CONTROLLER
Q603 1SS355
Q609 2SC3398-TA SWITCH
Q6005 2SC3398 POWER DET
DC-DC OSC
TP601 (PH2P)
TP6001 EH2P
CN601 9P FFC A: SHUT, 5V, HALF, 70EQ, METAL, GND, STOP SW
CN602 10P TAIKO: 7.5V, PB L, A GND, PB R, -7.5V, REEL+, REEL-, 5V (MOTOR), H/L, -7V (MOTOR)
CN603 9P FFC B: SHUT, 5V, HALF, 70EQ, METAL, GND, STOP SW
CN604 TAIKO: 7.5V, PB L, A GND, PB R, -7.5V, REEL+, REEL-, 5V (MOTOR), H/L, -7V (MOTOR)
CN607: BIAS, REC L, GND, REC R, RELAY, 5V, DIRECTION, QUITCK, -2.6V, TYPE
CN605 15P FFC: A GND, PB L, 7.5V, PB R, -7.5V, REC L, D GND, REC R, 5.6V, 5V, M GND, POWER ON/OFF, AUB, +7.5V, -7.5V
TO POWER BOARD A
CN606 12P FFC
(14) (3) (12) (1) (2) 13 16

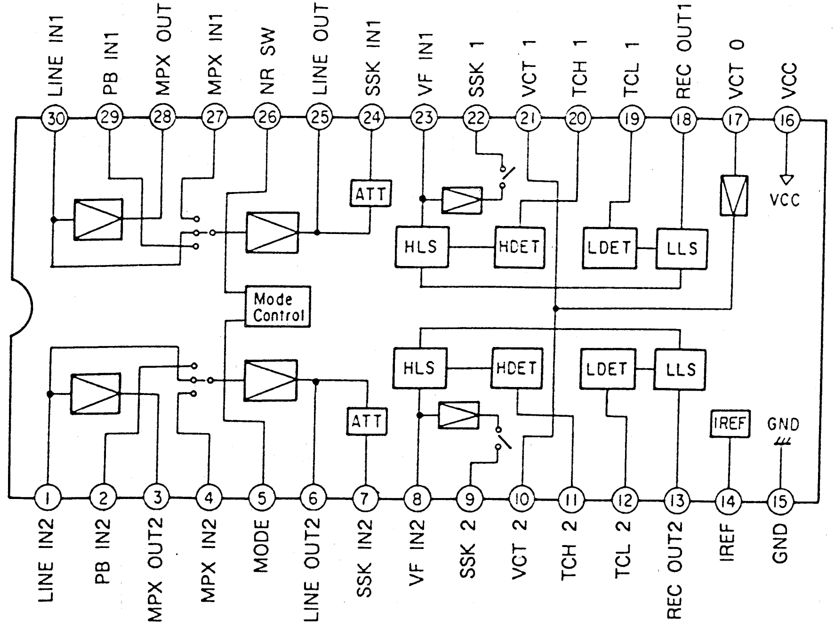


【MD-A BOARD】
IC31
PB EQ AMP
【MD-B BOARD】
IC105
SELECT SWITCH
IC106
ALC AMP
HP101 PLAYBACK HEAD
M101A REEL MOTOR
M102A CAPSTAN MOTOR
RV72A HIGH SPEED
NORMAL SPEED
NORMAL/HIGH SPEED SWITCH
PB(L) LEVEL
PB(R) LEVEL
HRPE101 REC/PB/ERASE HEAD
REC BIAS
BIAS OSC
【LEAF SW (A) BOARD】 (A DECK) TCM-190 RA13A
【LEAF SW (B) BOARD】 (B DECK) RB22A
IC81
ROTATION DET
STOP DET
Cr02 DET
HALF DET
METAL DET
ERASE PROOF (SIDE A)
ERASE PROOF (SIDE B)
GP2S09-C
【PANEL BOARD】
IC351
H0614022FPTCC814 DISPLAY CONTROL
FLUORESCENT DISPLAY TUBE
FL351
S901 : CD SYNCHRO
S902 : ▶▶
S903 : ◀◀
S904 : ● REC (DECK B ONLY)
S905 : DECK B
S906 : DECK A
S907 : COUNTER RESET
S908 : DOLBY NR
S909 : DUBBING MODE
S910 : ■
S911 : ◁
S912 : ▷
S913 : ❚❚ PAUSE (DECK B ONLY)
S914 : ● MUTE (DECK B ONLY)
S915 : DIRECTION MODE
D301 SEL4226R DUBBING MODE
D302 SEL4226R CD SYNCHRO
X951 4.19MHz
Q611 CAPSTAN MOTOR H/L SWITCH
Q612,613 CAPSTN MOTOR DECK A DECK B — DRIVE —
Q606 REC/PB SWITCH
Q102,202 LINE MUTE
DC-DC OSC
TO POWER BOARD A
CN601 A
CN602
CN603 B
CN604
CN607
CN605
SHUT
5V
HALF
70EQ
METAL
GND
STOP SW
7.5V
PB L
A GND
PB R
-7.5V
REEL+
REEL-
5V (MOTOR)
H/L
-7V (MOTOR)
BIAS
REC L
REC R
RELAY
DIRECTION
QUITCK
-2.6V
TYPE
POWER ON/OFF
AUB

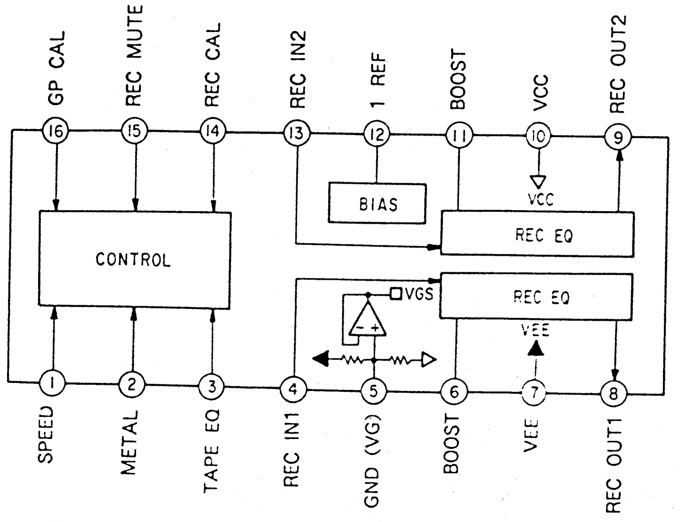

21
22
23
24
25
26
27
28
29
30
【MD-B BOARD】
CNP71
M101A REEL MOTOR
HIGH SPEED
CNP72
M102A CAPSTAN MOTOR
Q71A 2SA1602
NORMAL/HIGH SPEED SWITCH
CNJ31
+7.5V
L-CH (PB)
GND
R-CH (PB)
-7.5V
REEL (+)
REEL (-)
+5V
HIGH
-7V
LEAF SW (B) BOARD】 (B DECK) RB22A
CNP81
STOP DET
METAL DET
CrO2 DET
ERASE PROOF (SIDE A)
ERASE PROOF (SIDE B)
HALF DET
STOP
GND
METAL
70U
HALF
+5V
SHUT
IC81B
GP2S09-C
IC81
ROTATION DET
HRPE101 REC/PB/ERASE HEAD
CNP32 (5J-7P)
(L-CH)
(R-CH)
(ERASE)
PB EQ AMP
IC31B(1/2)
IC31
LM833M-FL63
IC31B(2/2)
PB(L) LEVEL
PB(R) LEVEL
RY31
D31 1SS355
REC BIAS
T51
METAL AC: 3.9
BIAS OSC
Q51 2SD1622S
Q52 2SD1622S
BIAS REG Q53 2SD1622S
RV72B HIGH SPEED
NORMAL SPEED
Q71B 2SA1602
NORMAL/HIGH SPEED SWITCH
M101B REEL MOTOR
M102B CAPSTAN MOTOR
CNJ33
BIAS
L-CH (REC)
GND
R-CH (REC)
RELAY
+5V
DIRECTION
QUICK
NC
NC
+7.5V
L-CH (PB)
GND
R-CH (PB)
-7.5V
REEL (+)
REEL (-)
+5V (MOTOR)
HIGH
-7V (MOTOR)
1
2
3
12
1, 2
IC351
H061402F2FPTC814 DISPLAY CONTROL
VCC
CLK
DATA
SYNC
KEY A
KEY B
RESET
TEST
OSC1
OSC2
X951 4.19MHz
FLUORESCENT DISPLAY TUBE
FL351
A
PLAY
HIGH
NORM
CD SYNC
B
REC PLAY
DOLBY NR
AMS RELAY
B C OFF

· **IC BLOCK DIAGRAM**

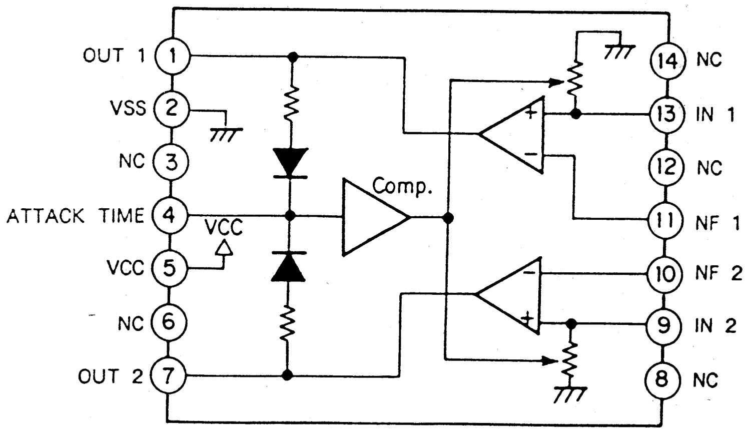
IC102 CXA1331M


LINE IN1
PB IN1
MPX OUT1
MPX IN1
NR SW
LINE OUT1
SSK IN1
VF IN1
SSK 1
VCT 1
TCH 1
TCL 1
REC OUT1
VCT 0
VCC
ATT
HLS
HDET
LDET
LLS
Mode Control
IREF
GND
LINE IN2
PB IN2
MPX OUT2
MPX IN2
MODE
LINE OUT2
SSK IN2
VF IN2
SSK 2
VCT 2
TCH 2
TCL 2
REC OUT2
IREF
GND

IC103 CXA1398M


GP CAL
REC MUTE
REC CAL
REC IN2
1 REF
BOOST
VCC
REC OUT2
BIAS
CONTROL
REC EQ
REC EQ
VGS
VEE
SPEED
METAL
TAPE EQ
REC IN1
GND (VG)
BOOST
VEE
REC OUT1

IC106 BA3308F


OUT 1
VSS
NC
ATTACK TIME
VCC
NC
OUT 2
VCC
Comp.
NC
IN 1
NC
NF 1
NF 2
IN 2
NC

Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: $\mu\mu$F 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $^1/_4$W or less unless otherwise specified.
- ▭ : nonflammable resistor.

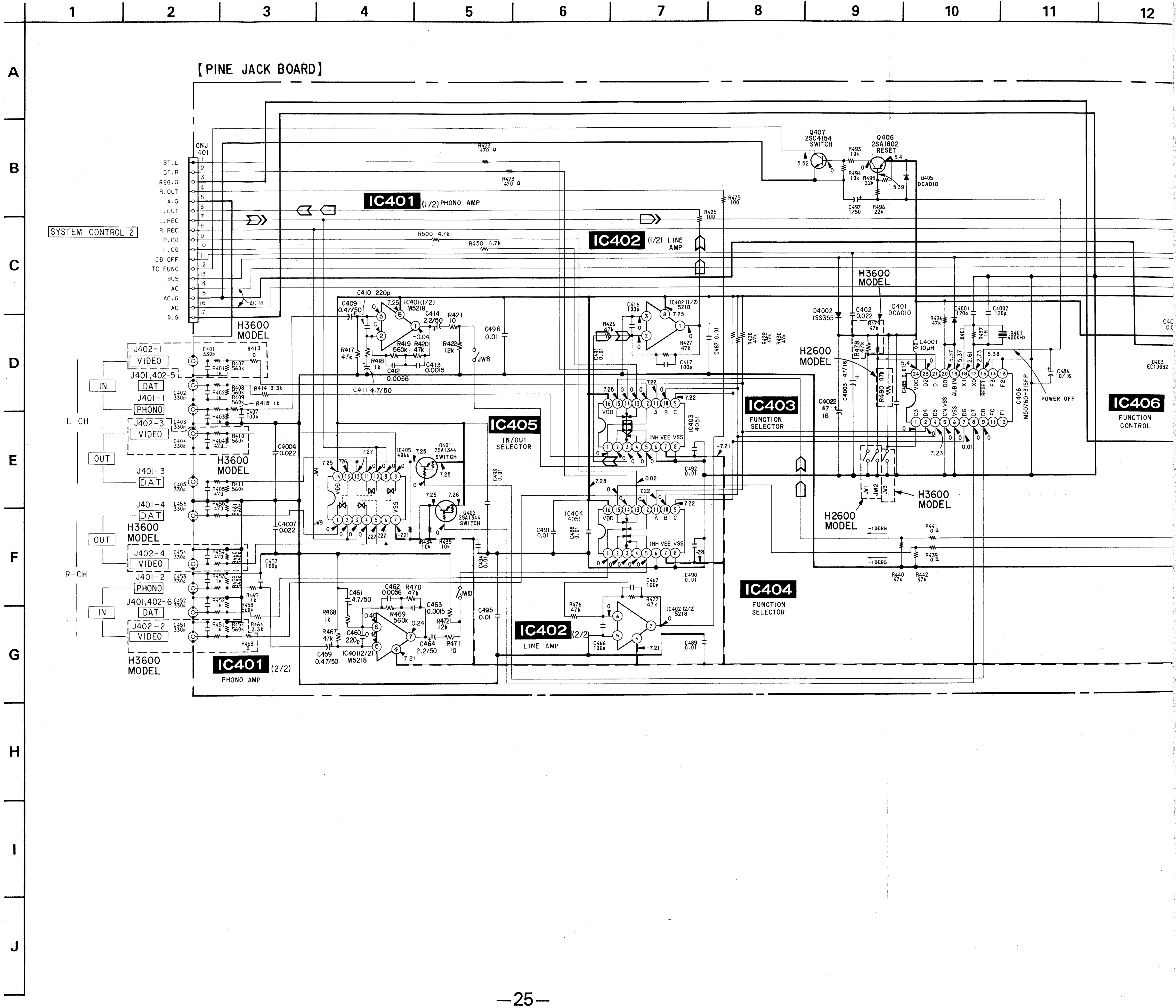
Note:	Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

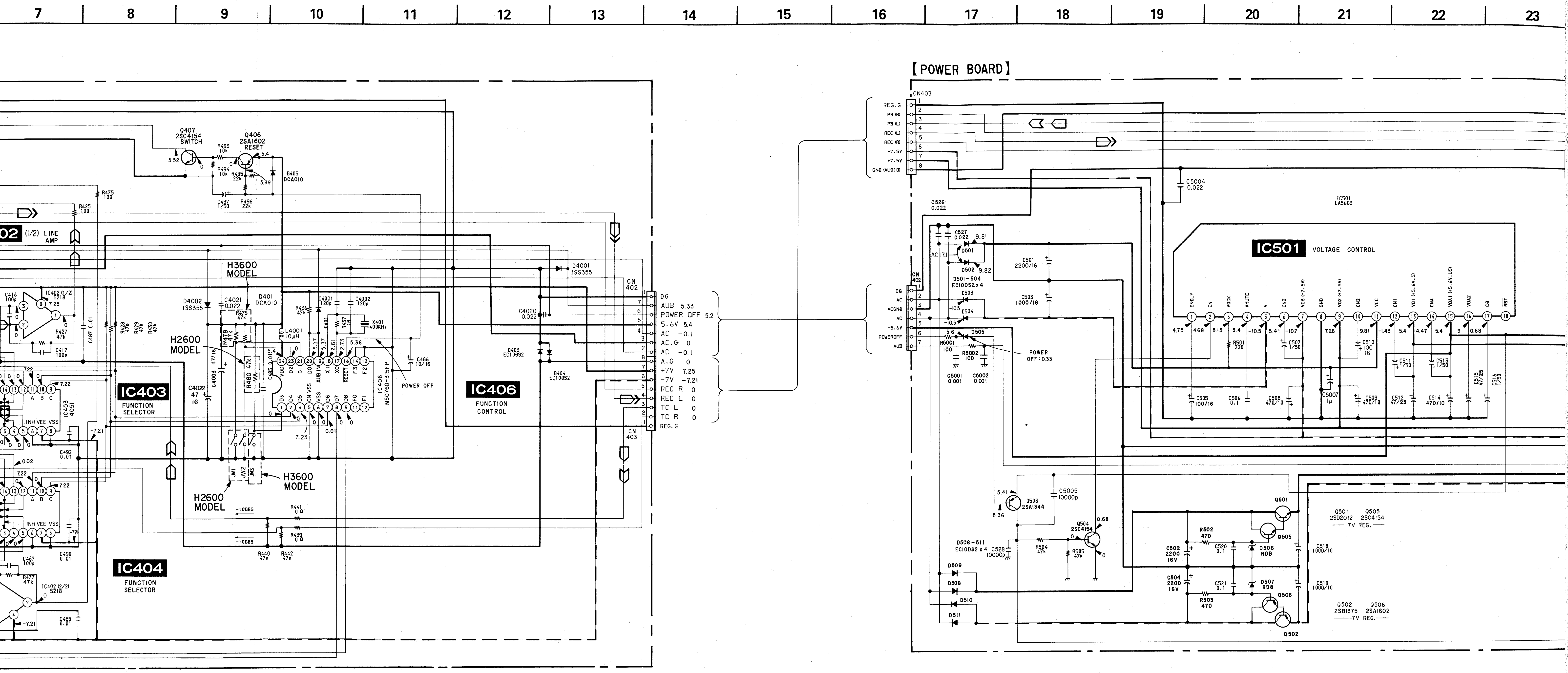
- ▬▬ : B+ Line
- ▬ ▬ : B– Line
- ☐ : adjustment for repair.

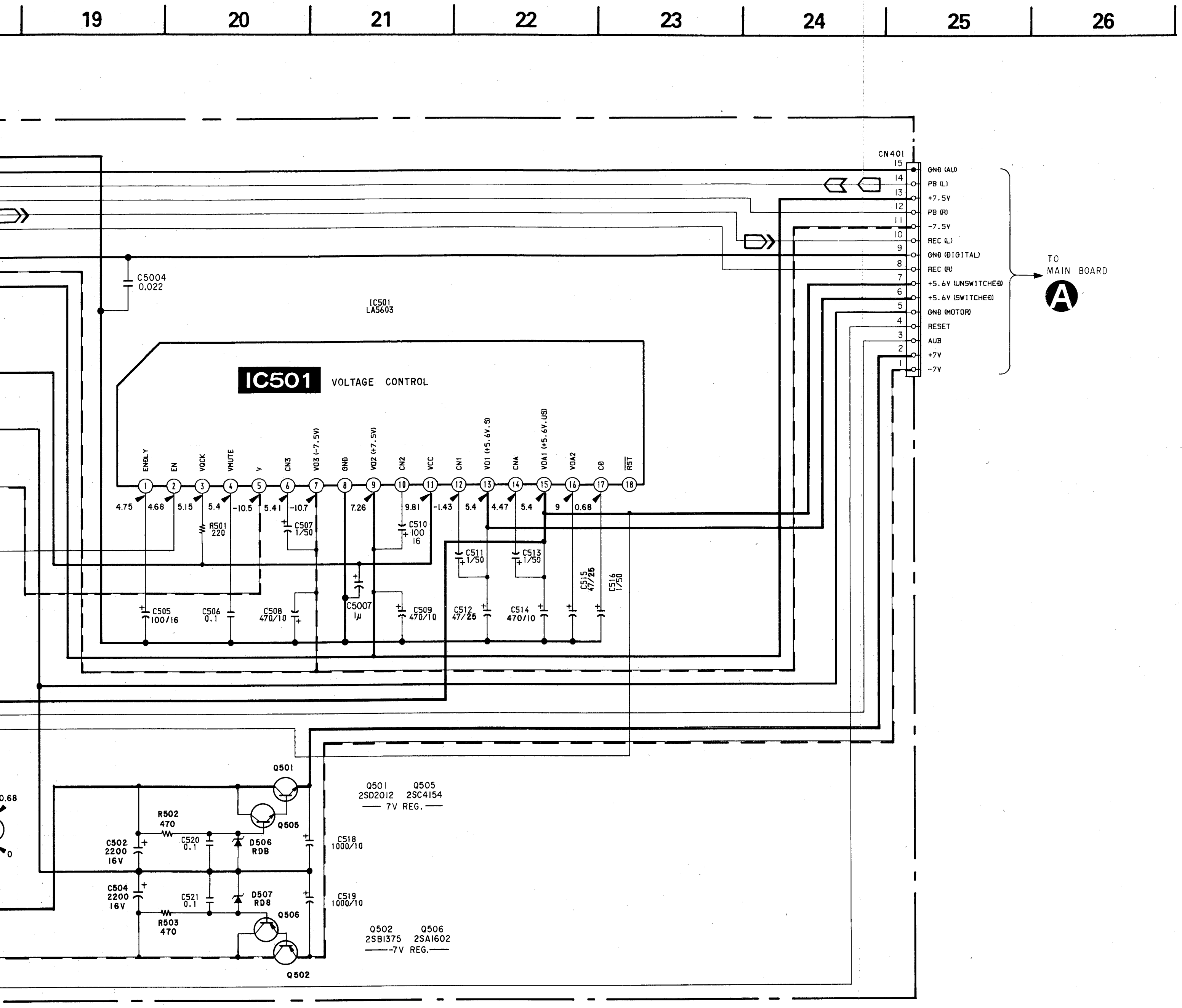
no mark : STOP   ‖ : PAUSE
( ) : PB   ◀◀▶▶ : FF/REW
< > : REC

- ▶ : FWD   ◀ : REV   ■ : STOP
  ▶▶ : FF   ◀◀ : REW   ● : REC
- Voltages are taken with a VOM (Input impedance 10M Ω) Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⊳ : PB (DECK A)
  ▷ : PB (DECK B)
  ▷› : REC (DECK B)

4-5. SCHEMATIC DIAGRAM – PIN JACK SECTION –

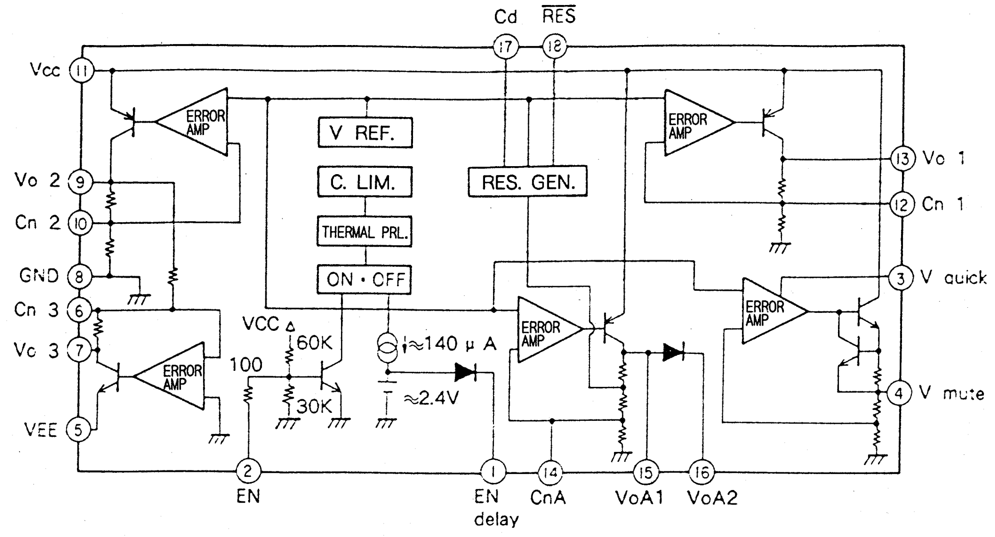

1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
F
G
H
I
J
[PINE JACK BOARD]
SYSTEM CONTROL 2
CNJ 401
ST.L
ST.R
REG.G
R.OUT
A.G
L.OUT
L.REC
R.REC
R.CB
L.CB
CB OFF
TC FUNC
BUS
AC
AC.G
AC
D.G
IC401 (1/2) PHONO AMP
IC402 (1/2) LINE AMP
IC405 IN/OUT SELECTOR
IC403 FUNCTION SELECTOR
IC404 FUNCTION SELECTOR
IC402 (2/2) LINE AMP
IC401 (2/2) PHONO AMP
IC406 FUNCTION CONTROL
IC406 M50760-315FP
IC401(1/2) M5218
IC401(2/2) M5218
IC402 (1/2) 5218
IC402 (2/2) 5218
IC403 4051
IC404 4051
IC405 4066
Q401 2SA1344 SWITCH
Q402 2SA1344 SWITCH
Q407 2SC4154 SWITCH
Q406 2SA1602 RESET
D405 DCA010
D401 DCA010
D4002 1SS355
X401 400KHz
L4001 10μH
POWER OFF
H3600 MODEL
H2600 MODEL
L-CH
R-CH
IN
OUT
J402-1 VIDEO
J401,402-5 DAT
J401-1 PHONO
J402-3 VIDEO
J401-3 DAT
J401-4 DAT
J402-4 VIDEO
J401-2 PHONO
J401,402-6 DAT
J402-2 VIDEO
R500 4.7k
R450 4.7k
R473 470 Ω
R475 100
R425 100
JW8
JW9
JW10
JW1
JW2
JW3


7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
【POWER BOARD】
Q407 2SC4154 SWITCH
Q406 2SA1602 RESET
R493 10k
R494 10k
R495 22k
R496 22k
C497 1/50
D405 DCA010
R475 100
R425 100
IC402 (1/2) LINE AMP
IC402 (1/2) 5218
H3600 MODEL
H2600 MODEL
D4002 1SS355
C4021 0.022
D401 DCA010
R479 47k
R478 47k
R480 47k
L4001 10μH
C4001 120p
C4002 120p
X401 400KHz
C4022 47 16
C4003 47/16
C486 10/16
POWER OFF
IC406 M50760-315FP
IC403
FUNCTION SELECTOR
IC403 4051
IC404
FUNCTION SELECTOR
IC406
FUNCTION CONTROL
D4001 1SS355
C4020 0.022
D403 EC10052
D404 EC10052
CN 402
CN 403
DG
AUB 5.33
POWER OFF 5.2
5.6V 5.4
AC -0.1
AC.G 0
AC -0.1
A.G 0
+7V 7.25
-7V -7.21
REC R 0
REC L 0
TC L 0
TC R 0
REG.G
JW1
JW2
JW3
R441 0Ω
R439 0Ω
R440 47k
R442 47k
C416 100p
C417 100p
R427 47k
C487 0.01
C492 0.01
C490 0.01
C467 100p
R477 47k
IC402 (2/2) 5218
C489 0.01
INH VEE VSS
A B C
CN403
REG.G
PB (R)
PB (L)
REC (L)
REC (R)
-7.5V
+7.5V
GND (AUGIO)
C5004 0.022
IC501 LA5603
IC501
VOLTAGE CONTROL
C526 0.022
C527 0.022
D501
D502
D501-504 EC10DS2 x 4
D503
D504
C501 2200/16
C503 1000/16
CN 402
DG
AC
ACGND
AC
+5.6V
POWEROFF
AUB
R5001 100
R5002 100
D505
POWER OFF: 0.33
C5001 0.001
C5002 0.001
ENBLY
EN
VGCK
VMUTE
V
CN3
VO3 (-7.5V)
GND
VO2 (+7.5V)
CN2
VCC
CN1
VO1 (+5.6V, 9)
CNA
VDA1 (+5.6V, US)
VDA2
C0
RST
C505 100/16
C506 0.1
R501 220
C507 1/50
C508 470/10
C5007 1μ
C510 100 16
C509 470/10
C511 1/50
C512 47/25
C513 1/50
C514 470/10
C515 47/25
C516 1/50
Q503 2SA1344
C5005 10000p
Q504 2SC4154
D508-511 EC10DS2 x 4
C528 10000p
R504 47k
R505 47k
D509
D508
D510
D511
Q501
Q505
Q502
Q506
C502 2200 16V
C504 2200 16V
R502 470
R503 470
C520 0.1
C521 0.1
D506 RD8
D507 RD8
C518 1000/10
C519 1000/10
Q501 2SD2012
Q505 2SC4154
7V REG.
Q502 2SB1375
Q506 2SA1602
-7V REG.

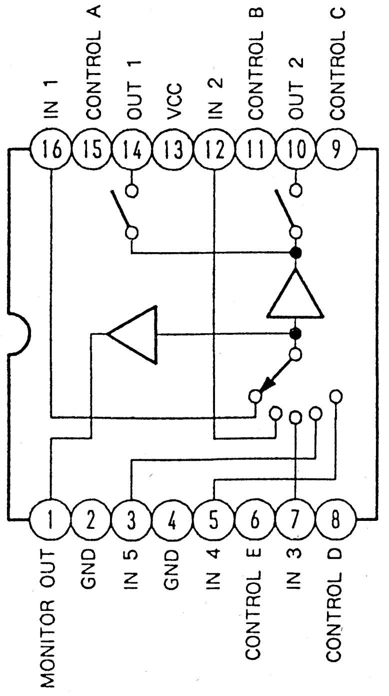

19
20
21
22
23
24
25
26
CN401
GND (AU)
PB (L)
+7.5V
PB (R)
-7.5V
REC (L)
GND (DIGITAL)
REC (R)
+5.6V (UNSWITCHED)
+5.6V (SWITCHED)
GND (MOTOR)
RESET
AUB
+7V
-7V
TO MAIN BOARD
A
C5004 0.022
IC501 LA5603
IC501
VOLTAGE CONTROL
ENDLY
EN
VQCK
VMUTE
V
CN3
VO3 (-7.5V)
GND
VO2 (+7.5V)
CN2
VCC
CN1
VO1 (+5.6V.S)
CNA
VOA1 (+5.6V.US)
VOA2
CD
RST
4.75
4.68
5.15
5.4
-10.5
5.41
-10.7
7.26
9.81
-1.43
5.4
4.47
5.4
9
0.68
R501 220
C507 1/50
C510 100 16
C511 1/50
C513 1/50
C515 47/25
C516 1/50
C505 100/16
C506 0.1
C508 470/10
C5007 1μ
C509 470/10
C512 47/25
C514 470/10
Q501
Q505
Q501 2SD2012
Q505 2SC4154
7V REG.
R502 470
C502 2200 16V
C520 0.1
D506 RD8
C518 1000/10
C504 2200 16V
C521 0.1
D507 RD8
R503 470
Q506
Q502
C519 1000/10
Q502 2SB1375
Q506 2SA1602
-7V REG.

· IC BLOCK DIAGRAM

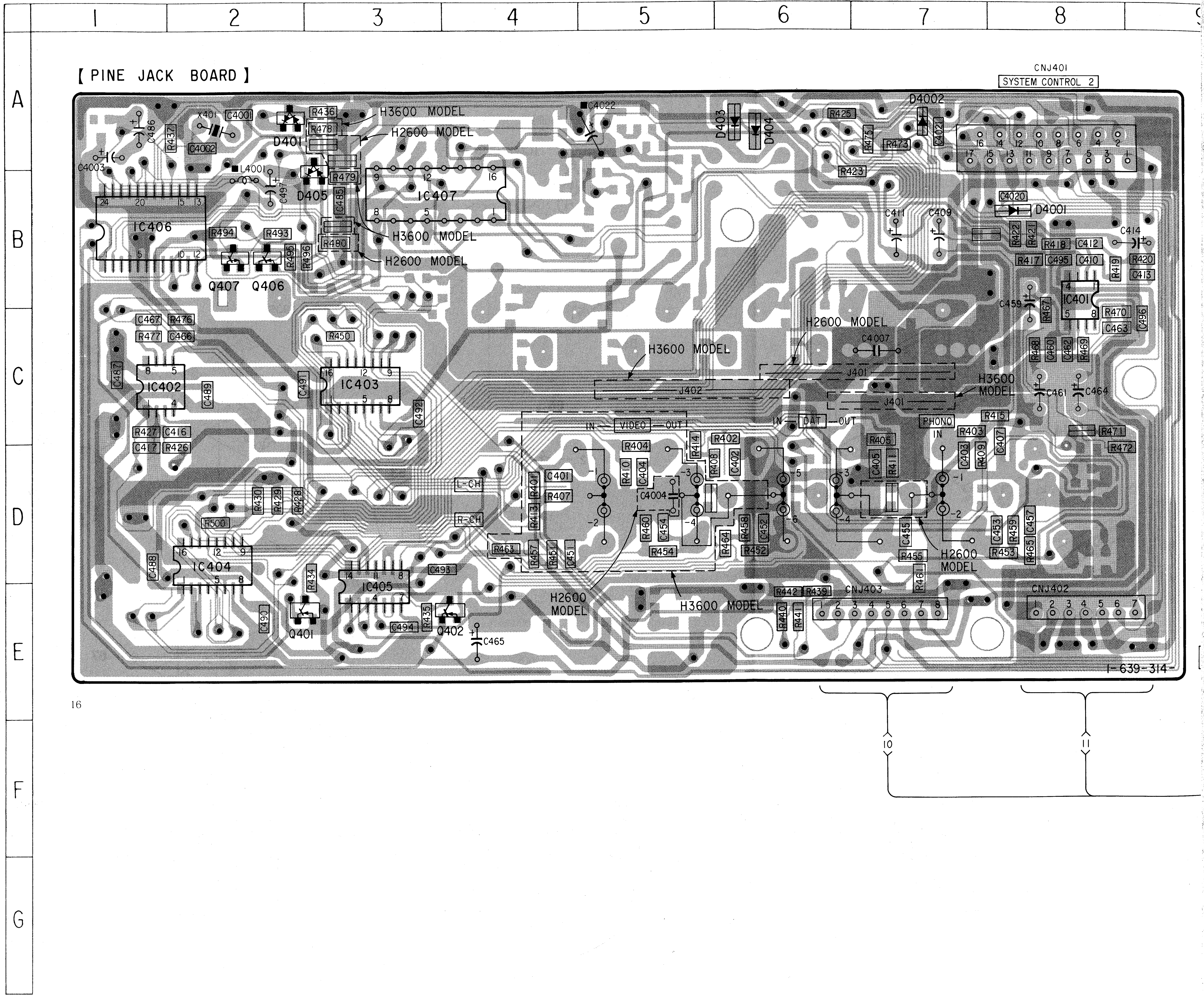
IC501 LA5603

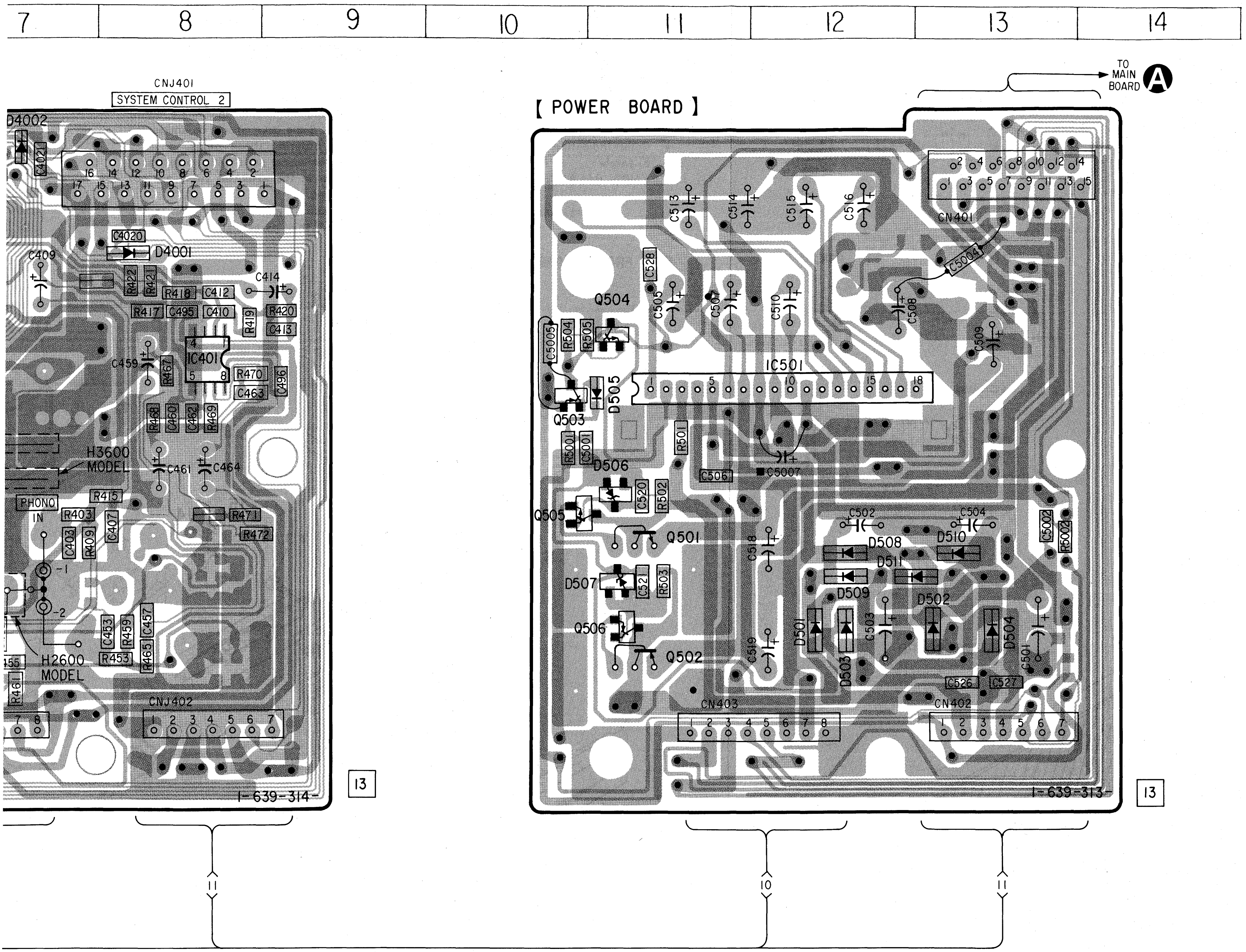

Cd
RES
Vcc
Vo 2
Cn 2
GND
Cn 3
Vc 3
VEE
ERROR AMP
V REF.
C. LIM.
THERMAL PRL.
ON · OFF
RES. GEN.
VCC
60K
100
30K
≈140 μ A
≈2.4V
Vo 1
Cn 1
V quick
V mute
EN
EN delay
CnA
VoA1
VoA2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17

IC407 BA7625


IN 1
CONTROL A
OUT 1
VCC
IN 2
CONTROL B
OUT 2
CONTROL C
16
15
14
13
12
11
10
9
1
2
3
4
5
6
7
8
MONITOR OUT
GND
IN 5
GND
IN 4
CONTROL E
IN 3
CONTROL D

4-6. PRINTED WIRING BOARDS – PIN JACK SECTION –


1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
【 PINE JACK BOARD 】
CNJ401
SYSTEM CONTROL 2
H3600 MODEL
H2600 MODEL
IC406
IC407
IC402
IC403
IC404
IC405
IC401
D401
D405
D403
D404
D4001
D4002
Q407
Q406
Q401
Q402
X401
L4001
J401
J402
IN VIDEO OUT
IN DAT OUT
PHONO IN
L-CH
R-CH
CNJ403
CNJ402
1-639-314-
16
10
11


7
8
9
10
11
12
13
14
CNJ401
SYSTEM CONTROL 2
D4002
C4020
D4001
C409
C414
R422
R421
R418
C412
R417
C495
C410
R419
R420
C413
IC401
C459
R467
R470
C496
C463
R468
C460
C462
R469
H3600 MODEL
C461
C464
PHONO IN
R415
R403
C403
R409
C407
R471
R472
C453
R459
C457
R453
R465
H2600 MODEL
R461
CNJ402
1-639-314-
13
[POWER BOARD]
TO MAIN BOARD
A
CN401
C513
C514
C515
C516
C528
C5004
Q504
C505
C507
C510
C508
C509
C5005
R504
R505
D505
IC501
Q503
R5001
C5001
R501
C506
C5007
D506
C520
R502
Q505
Q501
C518
C502
C504
D508
D510
D511
C5002
R5002
D507
C521
R503
D509
D502
Q506
C519
D501
D503
C503
D504
C501
Q502
C526
C527
CN403
CN402
1-639-313-
13
11
10
11

- Semiconductor Location

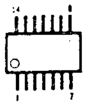
Ref. No.	Location
D401	A-2
D403	A-6
D404	A-6
D405	B-3
D501	D-12
D502	D-13
D503	D-12
D504	D-13
D505	C-11
D506	C-11
D507	D-11
D508	D-12
D509	D-12
D510	D-13
D511	D-13
D4001	B-8
D4002	A-7
IC401	C-8
IC402	C-1
IC403	C-3
IC404	D-2
IC405	E-3
IC406	B-1
IC501	C-12
Q401	E-3
Q402	E-4
Q406	B-2
Q407	B-2
Q501	D-11
Q502	D-11
Q503	C-10
Q504	B-11
Q505	C-10
Q506	D-11

Note on Mounting Diagram:

- ○—— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- ● : Through hole.
- ▨ : Pattern on the side which is seen.
- ▨ : Pattern of the rear side.

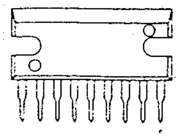
4-7. SEMICONDUCTOR LEAD LAYOUTS

BA3308F

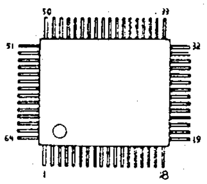


(TOP VIEW)

LA5603

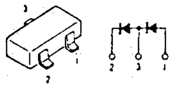


M50944-121FP

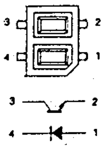

50
33
51
32
64
19
1
48

MARKING SIDE VIEW

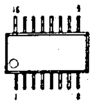
DCA010



NJL5165K-B

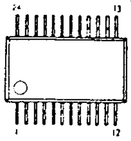


CD4052BCM-FL63
CXA1398M



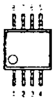
(TOP VIEW)

M50760-315FP



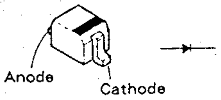
(TOP VIEW)

M51953BFP
M5218AFP

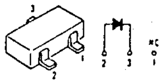


(TOP VIEW)

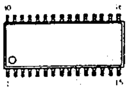
DTZ5.1C
DTZ9.1B
1SS355


Anode
Cathode

RD8.2M-B3

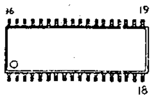


CXA1331M



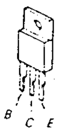
(TOP VIEW)

M50925-482FP

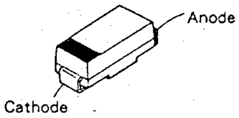


(TOP VIEW)

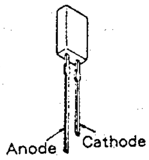
2SB1094-L
2SD2012



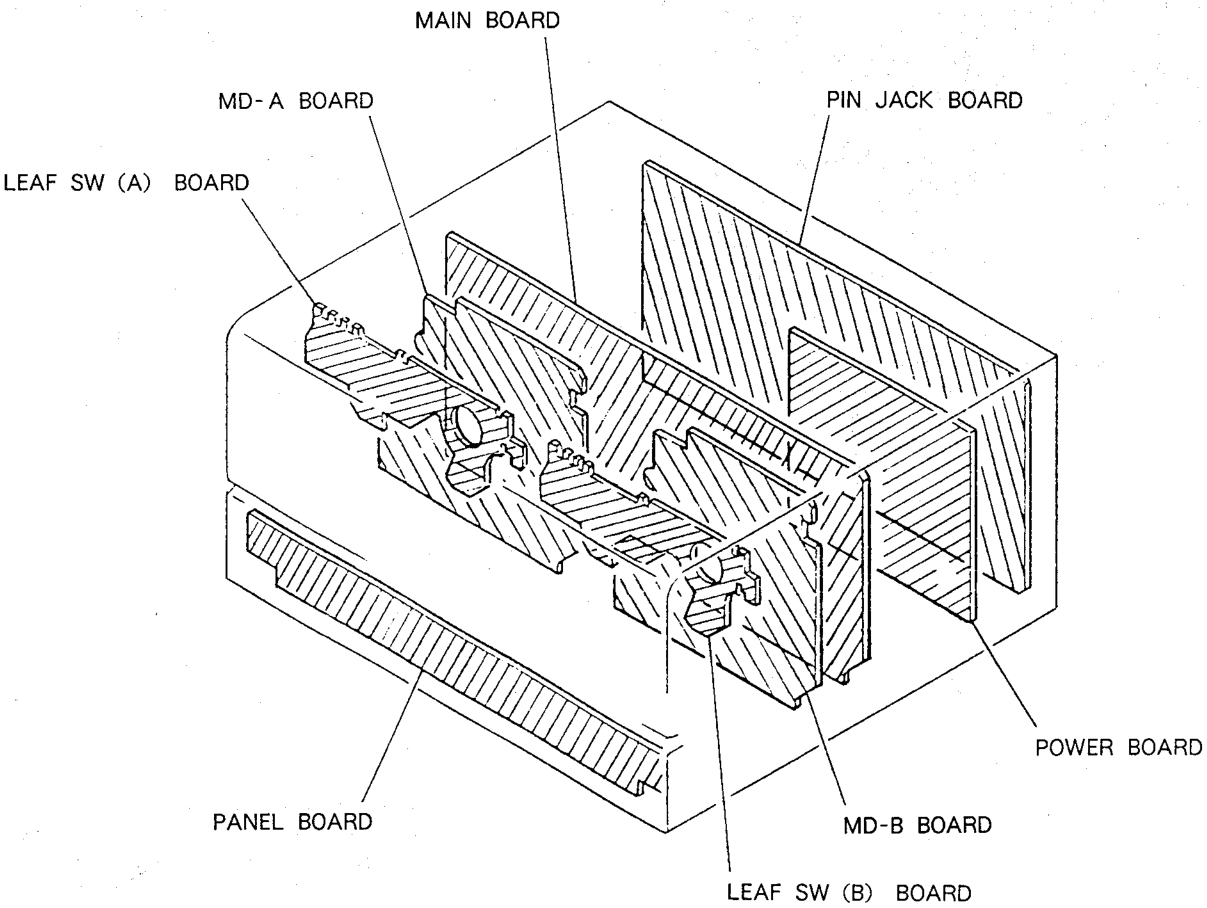
EC10DS2


Anode
Cathode

SEL4226R-CD


Anode
Cathode

4-8. CIRCUIT BOARDS LOCATION

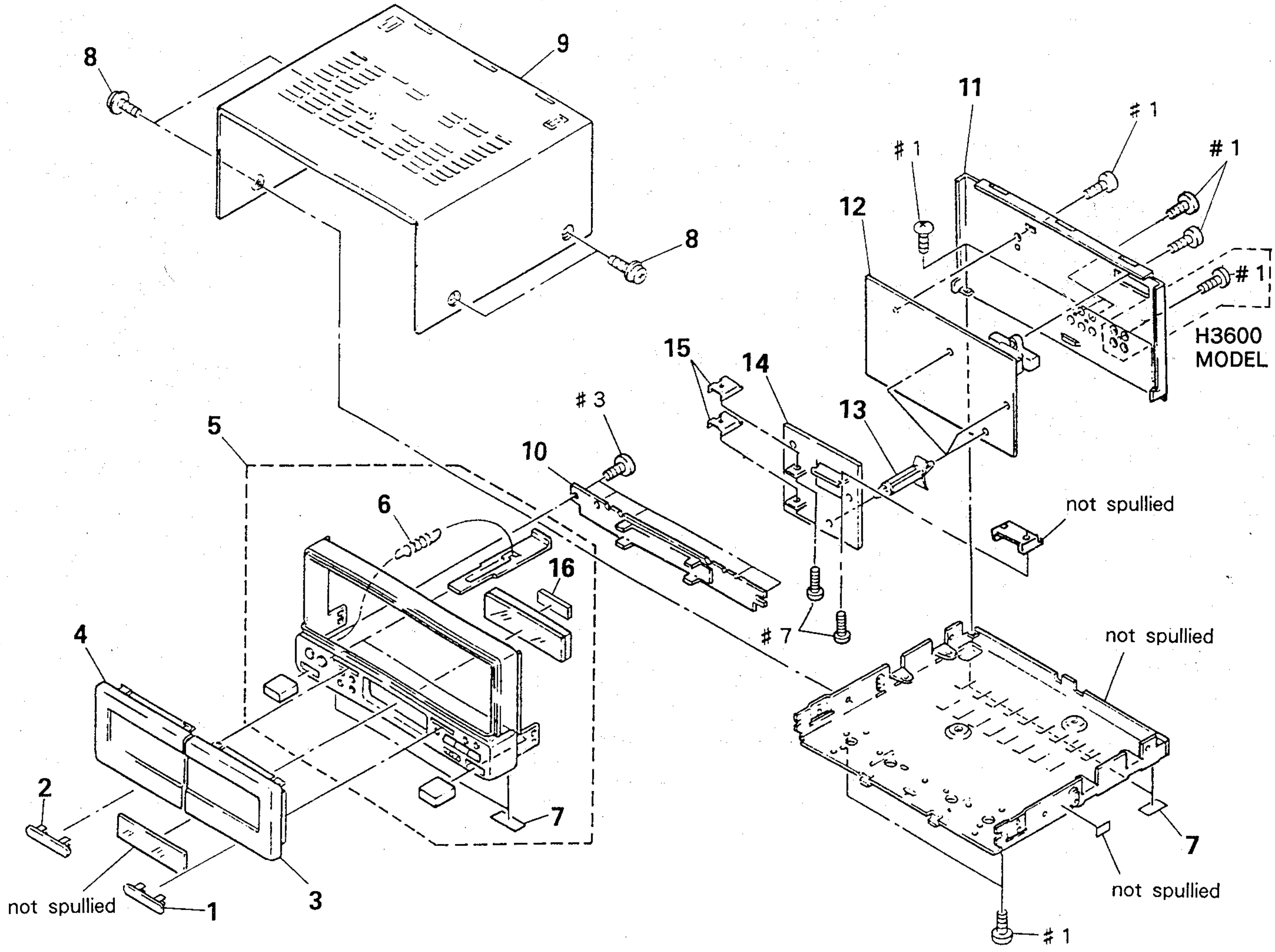

MAIN BOARD
MD-A BOARD
PIN JACK BOARD
LEAF SW (A) BOARD
POWER BOARD
PANEL BOARD
MD-B BOARD
LEAF SW (B) BOARD

SECTION 5
EXPLODED VIEWS

NOTE :

- – XX, – X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts Example :
  KNOB, BALANCE (WHITE)...(RED)
  ↑ ↑
  Parts color Cabinet's color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list is given in the last of this parts list.

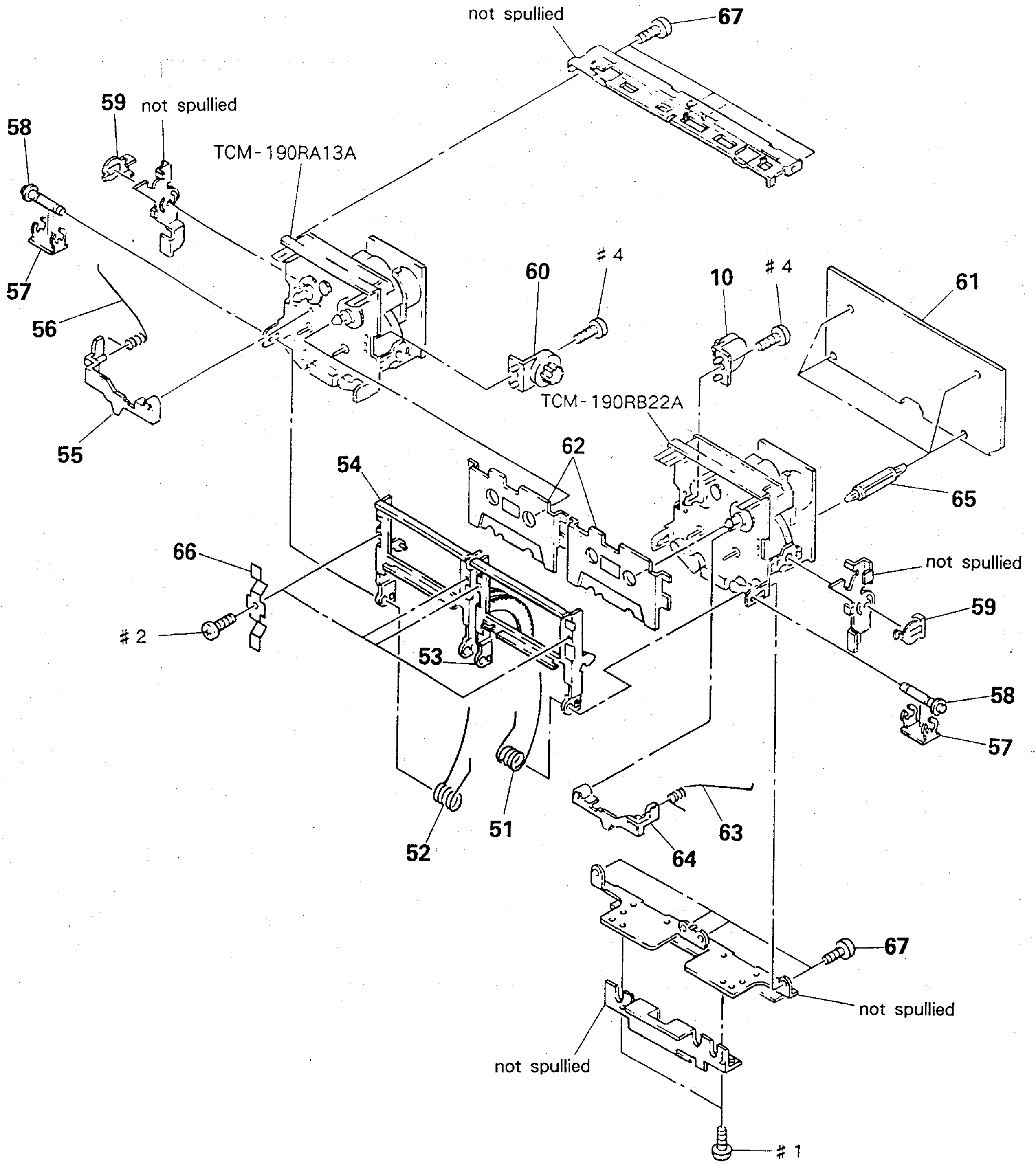
5-1. FRONT PANEL SECTION-1



Ref. No.	Part No.	Descriptiion	Remark
1	3-367-872-11	COVER(AZIMUTH)	
2	3-367-872-01	COVER(AZIMUTH)	
3	X-3362-918-1	LID(B)ASSY, CASSETTE	
4	X-3362-919-1	LID(A)ASSY, CASSETTE	
5	X-3362-921-1	PANEL ASSY, FRONT	
6	3-567-110-00	SPRING, TENSION	
7	4-930-336-01	FOOT(FELT)	
8	3-363-099-01	SCREW(CASE +3X8 TP2)	
9	* 4-944-522-01	CASE(K211522)	
10	* A-2006-410-A	PANEL BOARD	

Ref. No.	Part No.	Descriptiion	Remark
11	* 3-366-786-11	PANEL, BACK(H3600:EXCEPT Germany, Italian)	
	* 3-366-786-21	PANEL, BACK(H3600:Germany, Italian)	
	* 3-366-786-31	PANEL, BACK(H2600:EXCEPT Germany, Italian)	
	* 3-366-786-41	PANEL, BACK(H2600:Germany, Italian)	
12	* A-2006-411-A	PIN JACK BOARD(H3600)	
	* A-2006-417-A	PIN JACK BOARD(H2600)	
13	* 3-703-353-02	SUPPORT, PC BOARD	
14	* A-2006-613-A	POWER BOARD	
15	* 3-309-144-21	HEAT SINK	
16	4-906-024-11	TABLE, PEMT	

5-2. FRONT PANEL SECTION-2

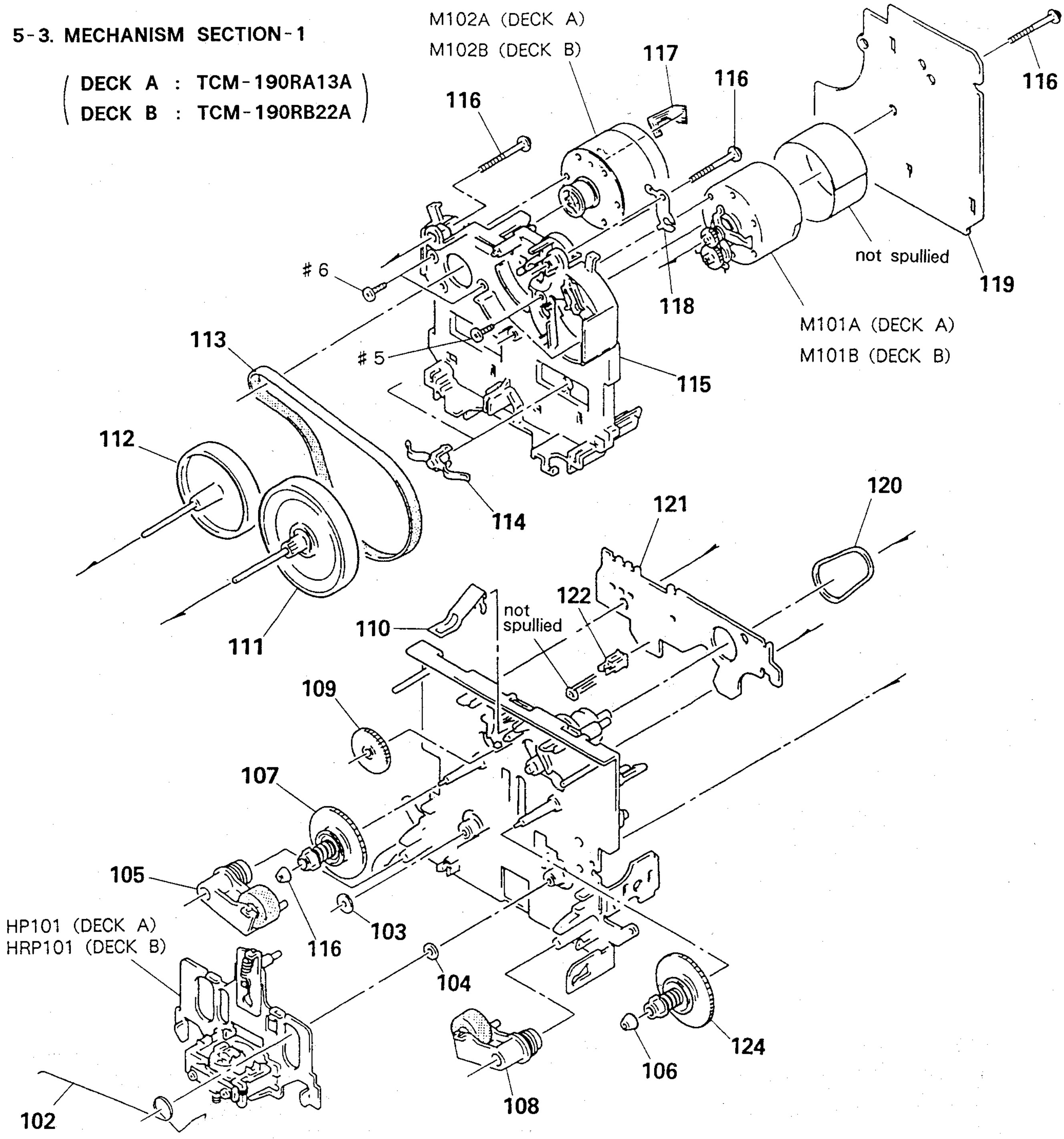

not spullied
67
59
not spullied
58
TCM-190RA13A
57
56
60
#4
10
#4
61
55
TCM-190RB22A
62
54
65
66
not spullied
59
#2
53
58
57
51
63
52
64
67
not spullied
not spullied
#1

Ref. No.	Part No.	Descriptiion	Remark
51	3-354-960-01	SPRING(LOADING R), TORSION	
52	3-354-959-01	SPRING(LOADING L), TORSION	
53	X-3362-856-1	HOLDER(R)ASSY, CASSETTE	
54	X-3362-857-1	HOLDER(L)ASSY, CASSETTE	
55	3-354-955-01	LEVER(EJ SAFTY LEVER L)	
56	3-354-961-01	SPRING(EJ SAFTY SPRING L)	
57	3-367-720-01	RING(W), RETAINING	
58	3-367-721-01	SHAFT(FULCRUM SHAFT)	
59	3-354-957-01	JOINT(LOCK LEVER)	

Ref. No.	Part No.	Descriptiion	Remark
60	3-354-963-01	DAMPER	
61	* A-2006-407-A	MAIN BOARD	
62	3-367-711-01	RETAINER, CASSETTE	
63	3-354-962-01	SPRING(EJ SAFTY SPRING R)	
64	3-354-956-01	LEVER(EJ SAFTY LEVER R)	
65	* 3-682-419-21	HOLDER, P. C. B	
66	3-340-137-01	SPRING, CASSETTE RETAINER	
67	4-928-635-01	SCREW, +BV (2. 6X8) TAPPING	

5-3. MECHANISM SECTION-1

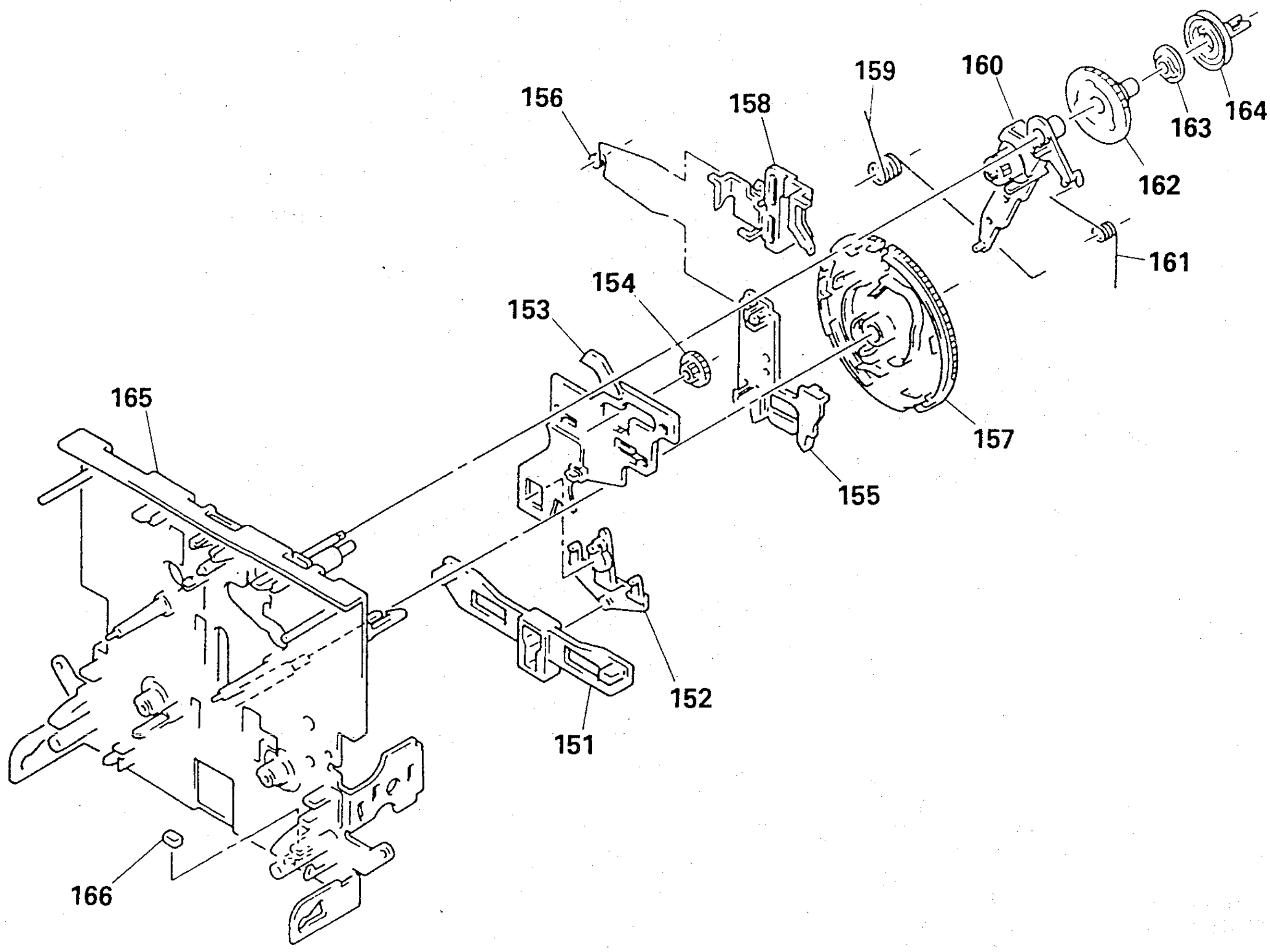
(DECK A : TCM-190RA13A
DECK B : TCM-190RB22A)


M102A (DECK A)
M102B (DECK B)
117
116
116
116
#6
118
not spullied
119
113
#5
M101A (DECK A)
M101B (DECK B)
115
112
114
121
120
122
not spullied
110
111
109
107
105
HP101 (DECK A)
HRP101 (DECK B)
116
103
104
124
106
108
102

Ref. No.	Part No.	Descriptiion	Remark
102	3-359-455-01	SPRING, TORSION	
103	3-356-714-01	WASHER	
104	3-356-713-01	WASHER	
105	X-3359-409-1	LEVER(PINCH LEVER REV) ASSY	
106	3-362-308-01	CAP(REEL)	
107	X-3362-078-1	TABLE ASSY(B), REEL	
108	X-3359-408-1	LEVER(PINCH LEVER FWD) ASSY	
109	3-359-424-01	GEAR(REV GEAR)	
110	3-359-430-01	SPRING(CASSETTE RETAINER), LEAF	
111	X-3359-406-1	FLYWHEEL(FWD) COMPLETE ASSY	
112	X-3359-410-1	FLYWHEEL(REV) ASSY	
113	3-359-417-01	BELT(FLAT), CAPSTAN	
114	3-575-321-00	RETAINER, THRUST, CAPSTAN	
115	* 3-359-436-01	BASE(THRUST RETAINER), FITTING	
116	3-359-414-01	SCREW(+PTPWH 2X23)	
117	1-638-983-11	PC BOARD, MOTOR FLEXIBLE	
118	3-359-450-01	PLATE, GROUND	
119	* A-2006-400-A	MD-B BOARD(RB22A)(DECK B)	
	* A-2006-399-A	MD-A BOARD(RA12A)(DECK A)	
120	3-359-466-01	BELT(FR), SQUARE	
121	* 1-634-841-11	LEAF SW(B)BOARD(RB22A)(DECK B)	
	* 1-634-841-11	LEAF SW(A)BOARD(RA12A)(DECK A)	
122	3-343-419-01	HOLDER(S SENSOR A)	
124	X-3359-404-1	TABLE ASSY, REEL	
HP101	A-2003-868-B	BASE ASSY, HEAD(DECK A)	
HRP101	A-2003-838-A	BASE ASSY, HEAD(DECK B)	
M101A	A-2003-474-A	MOTOR(REEL MOTOR) ASSY(DECK A)	
M101B	A-2003-474-A	MOTOR(REEL MOTOR) ASSY(DECK B)	
M102A	X-3359-417-1	MOTOR(CAPSTAN MOTOR) ASSY(DECK A)	
M102B	X-3359-417-1	MOTOR(CAPSTAN MOTOR) ASSY(DECK B)	

5-4. MECHANISM SECTION-2

(DECK A : TCM-190RA13A
DECK B : TCM-190RB22A)



Ref. No.	Part No.	Descriptiion	Remark	Ref. No.	Part No.	Descriptiion	Remark
151	* 3-359-425-01	SLIDER(REVERSE SLIDER)		159	3-359-456-01	SPRING(TRIGGER SPRING), TORSION	
152	3-359-426-01	LEVER(REVERSE LEVER)		160	X-3359-405-1	LEVER(FR ARM) ASSY	
153	* 3-359-415-01	SLIDER(TRIGGER SLIDER)		161	3-359-453-01	SPRING(FR ARM), TORSION	
154	3-359-448-01	GEAR(TRIGGER)		162	3-359-419-01	GEAR(FR GEAR)	
155	* 3-359-427-01	SLIDER(LEVERSE SLIDER)		163	3-359-421-01	CLUTCH(REEL DISK)	
156	3-359-454-01	SPRING, TORSION		164	3-359-418-01	PULLEY(FR PULLEY)	
157	3-359-420-01	GEAR(CAM GEAR)		165	X-3359-415-1	CHASSIS ASSY, MECHANICAL	
158	3-359-429-01	SLIDER(BRAKE PLATE)		166	3-359-469-01	SPACER	

SECTION 6
ELECTRICAL PARTS LIST

NOTE :

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be defferent from the parts specified in the diagrams or the components used on the set.
- −XX, −X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL : metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : μ, for example :
  uA... : μA... , uPA... , μPA... ,
  uPB... , μPB... , uPC... , μPC... ,
  uPD..., μPD...
- CAPACITORS :
  uF : μF
- COILS
  uH : μH

Ref. No.	Part No.	Descriptiion				Remark
	* A-2006-407-A	MAIN BOARD **********				
	* A-2006-410-A	PANEL BOARD ***********				
	* A-2006-411-A	PIN JACK BOARD (H3600)				
	* A-2006-417-A	PIN JACK BOARD (H2600) **************				
	* A-2006-613-A	POWER BOARD ***********				
	* 3-309-144-21	HEAT SINK				
	* 3-367-839-01	HOLDER, FL TUBE				
	9-911-863-XX	SPACER				
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S				
		〈 CAPACITOR 〉				
C101	1-136-158-00	FILM	0.027uF	5%	50V	
C102	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V	
C103	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V	
C104	1-130-475-00	MYLAR	0.0022uF	5%	50V	
C105	1-130-475-00	MYLAR	0.0022uF	5%	50V	
C106	1-164-505-11	CERAMIC CHIP	2.2uF		16V	
C107	1-136-174-00	FILM	0.56uF	5%	50V	
C108	1-136-171-00	FILM	0.33uF	5%	50V	
C109	1-164-505-11	CERAMIC CHIP	2.2uF		16V	
C110	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C111	1-164-005-11	CERAMIC CHIP	0.47uF		25V	
C112	1-164-505-11	CERAMIC CHIP	2.2uF		16V	
C113	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C114	1-164-505-11	CERAMIC CHIP	2.2uF		16V	
C115	1-164-505-11	CERAMIC CHIP	2.2uF		16V	
C116	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C201	1-136-158-00	FILM	0.027uF	5%	50V	
C202	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V	
C203	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V	
C204	1-130-475-00	MYLAR	0.0022uF	5%	50V	
C205	1-130-475-00	MYLAR	0.0022uF	5%	50V	
C206	1-164-505-11	CERAMIC CHIP	2.2uF		16V	
C207	1-136-174-00	FILM	0.56uF	5%	50V	
C208	1-136-171-00	FILM	0.33uF	5%	50V	
C209	1-164-505-11	CERAMIC CHIP	2.2uF		16V	
C210	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C211	1-164-005-11	CERAMIC CHIP	0.47uF		25V	
C212	1-164-505-11	CERAMIC CHIP	2.2uF		16V	
C213	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C214	1-164-505-11	CERAMIC CHIP	2.2uF		16V	
C215	1-164-505-11	CERAMIC CHIP	2.2uF		16V	
C216	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C351	1-126-163-11	ELECT	4.7uF	20%	50V	
C352	1-124-638-11	ELECT	22uF	20%	10V	
C353	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C354	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C401	1-163-003-11	CERAMIC CHIP	330PF	10%	50V(H3600)	
C402	1-163-003-11	CERAMIC CHIP	330PF	10%	50V	
C403	1-163-003-11	CERAMIC CHIP	330PF	10%	50V	
C404	1-163-003-11	CERAMIC CHIP	330PF	10%	50V(H3600)	
C405	1-163-003-11	CERAMIC CHIP	330PF	10%	50V	
C407	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C409	1-124-465-00	ELECT	0.47uF	20%	50V	
C410	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	
C411	1-126-163-11	ELECT	4.7uF	20%	50V	
C412	1-163-018-00	CERAMIC CHIP	0.0056uF	5%	50V	
C413	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V	
C414	1-124-257-00	ELECT	2.2uF	20%	50V	
C416	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C417	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C451	1-163-003-11	CERAMIC CHIP	330PF	10%	50V(H3600)	
C452	1-163-003-11	CERAMIC CHIP	330PF	10%	50V	
C453	1-163-003-11	CERAMIC CHIP	330PF	10%	50V	
C454	1-163-003-11	CERAMIC CHIP	330PF	10%	50V(H3600)	
C455	1-163-003-11	CERAMIC CHIP	330PF	10%	50V	
C457	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C459	1-124-465-00	ELECT	0.47uF	20%	50V	
C460	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	
C461	1-126-163-11	ELECT	4.7uF	20%	50V	
C462	1-163-018-00	CERAMIC CHIP	0.0056uF	5%	50V	
C463	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V	
C464	1-124-257-00	ELECT	2.2uF	20%	50V	
C466	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C467	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C485	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C486	1-126-157-11	ELECT	10uF	20%	16V	
C487	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C488	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C489	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C490	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C491	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C492	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C493	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C494	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C495	1-164-232-11	CERAMIC CHIP	0.01uF		50V	

MAIN PANEL PIN JACK POWER

Ref. No.	Part No.	Descriptiion				Remark
C496	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C497	1-126-301-11	ELECT	1uF	20%	50V	
C501	1-124-556-11	ELECT	2200uF	20%	16V	
C502	1-124-556-11	ELECT	2200uF	20%	16V	
C503	1-124-360-00	ELECT	1000uF	20%	16V	
C504	1-124-556-11	ELECT	2200uF	20%	16V	
C505	1-126-023-11	ELECT	100uF	20%	16V	
C506	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C507	1-124-903-11	ELECT	1uF	20%	50V	
C508	1-124-472-11	ELECT	470uF	20%	10V	
C509	1-124-472-11	ELECT	470uF	20%	10V	
C510	1-126-023-11	ELECT	100uF	20%	16V	
C511	1-124-903-11	ELECT	1uF	20%	50V	
C512	1-124-477-11	ELECT	47uF	20%	25V	
C513	1-124-903-11	ELECT	1uF	20%	50V	
C514	1-124-472-11	ELECT	470uF	20%	10V	
C515	1-124-477-11	ELECT	47uF	20%	25V	
C516	1-124-903-11	ELECT	1uF	20%	50V	
C518	1-124-473-11	ELECT	1000uF	20%	10V	
C519	1-124-473-11	ELECT	1000uF	20%	10V	
C520	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C521	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C526	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V	
C527	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V	
C528	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C601	1-164-346-11	CERAMIC CHIP	1uF		16V	
C602	1-164-346-11	CERAMIC CHIP	1uF		16V	
C603	1-164-346-11	CERAMIC CHIP	1uF		16V	
C604	1-164-346-11	CERAMIC CHIP	1uF		16V	
C605	1-164-346-11	CERAMIC CHIP	1uF		16V	
C606	1-164-346-11	CERAMIC CHIP	1uF		16V	
C607	1-164-346-11	CERAMIC CHIP	1uF		16V	
C608	1-164-505-11	CERAMIC CHIP	2.2uF		16V	
C609	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	
C610	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C611	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C612	1-164-222-11	CERAMIC CHIP	0.22uF		25V	
C615	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C616	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	
C617	1-124-472-11	ELECT	470uF	20%	10V	
C618	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C619	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	
C620	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C621	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C622	1-124-472-11	ELECT	470uF	20%	10V	
C623	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C624	1-124-472-11	ELECT	470uF	20%	10V	
C625	1-126-059-11	ELECT	10uF	20%	50V	
C626	1-126-059-11	ELECT	10uF	20%	50V	
C629	1-126-157-11	ELECT	10uF	20%	16V	
C632	1-136-594-11	FILM	0.018uF	5%	100V	
C633	1-124-234-00	ELECT	22uF	20%	16V	
C639	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C862	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C4001	1-163-119-00	CERAMIC CHIP	120PF	5%	50V	
C4002	1-163-119-00	CERAMIC CHIP	120PF	5%	50V	
C4003	1-124-589-11	ELECT	47uF	20%	16V	
C4004	1-101-005-00	CERAMIC	22000PF		50V	
C4007	1-101-005-00	CERAMIC	22000PF		50V	

Ref. No.	Part No.	Descriptiion				Remark
C4020	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V	
C4021	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V	
C4022	1-124-589-11	ELECT	47uF	20%	16V	
C5001	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C5002	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C5004	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V	
C5005	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C5007	1-124-903-11	ELECT	1uF	20%	50V	
C6008	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C6009	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C6010	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C6011	1-163-129-00	CERAMIC CHIP	330PF	5%	50V	
C6012	1-163-129-00	CERAMIC CHIP	330PF	5%	50V	
C6013	1-126-023-11	ELECT	100uF	20%	16V	
C6020	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	
C6021	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	
C6022	1-164-346-11	CERAMIC CHIP	1uF		16V	
C6026	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	
C6027	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	
C6029	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	
C6030	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	
C6031	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C6035	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	
		〈 CONNECTOR 〉				
CN351	1-580-883-21	SOCKET, CONNECTOR (SMT) 12P				
CN401	1-568-834-11	SOCKET, CONNECTOR 15P				
CN402	* 1-573-187-11	SOCKET, CONNECTOR 7P				
CN403	1-573-388-11	SOCKET, CONNECTOR 8P				
CN601	1-573-101-11	SOCKET, CONNECTOR 9P				
CN602	1-580-783-11	PLUG, CONNECTOR				
CN603	1-573-101-11	SOCKET, CONNECTOR 9P				
CN604	1-580-783-11	PLUG, CONNECTOR				
CN605	* 1-568-858-11	SOCKET, CONNECTOR 15P				
CN606	1-568-795-11	SOCKET, CONNECTOR 12P				
CN607	1-580-783-11	PLUG, CONNECTOR				
CNJ401	* 1-580-740-11	SOCKET, CONNECTOR 17P(SYSTEM CONTROL 2)				
		〈 DIODE 〉				
D301	8-719-312-30	DIODE SEL4226R-CD				
D302	8-719-312-30	DIODE SEL4226R-CD				
D401	8-719-990-36	DIODE DCA010				
D403	8-719-210-33	DIODE EC10DS2				
D404	8-719-210-33	DIODE EC10DS2				
D405	8-719-990-36	DIODE DCA010				
D501	8-719-210-33	DIODE EC10DS2				
D502	8-719-210-33	DIODE EC10DS2				
D503	8-719-210-33	DIODE EC10DS2				
D504	8-719-210-33	DIODE EC10DS2				
D505	8-719-988-62	DIODE 1SS355				
D506	8-719-106-36	DIODE RD8.2M-B3				
D507	8-719-106-36	DIODE RD8.2M-B3				
D508	8-719-210-33	DIODE EC10DS2				
D509	8-719-210-33	DIODE EC10DS2				
D510	8-719-210-33	DIODE EC10DS2				
D511	8-719-210-33	DIODE EC10DS2				
D601	8-719-977-24	DIODE DTZ9.1B				
D602	8-719-988-62	DIODE 1SS355				
D603	8-719-988-62	DIODE 1SS355				

MAIN PANEL PIN JACK POWER

Ref. No.	Part No.	Description	Remark
D604	8-719-210-33	DIODE EC10DS2	
D605	8-719-988-62	DIODE 1SS355	
D606	8-719-977-20	DIODE DTZ5.1C	
D607	8-719-210-33	DIODE EC10DS2	
D608	8-719-210-33	DIODE EC10DS2	
D4001	8-719-988-62	DIODE 1SS355	
D4002	8-719-988-62	DIODE 1SS355	
D6010	8-719-988-62	DIODE 1SS355	
D6011	8-719-988-62	DIODE 1SS355	
D6012	8-719-988-62	DIODE 1SS355	
		〈 INDICATOR 〉	
FL351	1-519-638-11	INDICATOR TUBE, FLUORESCENT	
		〈 IC 〉	
IC101	8-759-300-71	IC HD14053BFP	
IC102	8-752-055-08	IC CXA1331M	
IC103	8-752-056-00	IC CXA1398M	
IC104	8-759-636-55	IC M5218AFP	
IC105	8-759-516-47	IC CD4066BCM-FL63	
IC106	8-759-998-71	IC BA3308F	
IC351	8-759-323-35	IC HD-614023	
IC401	8-759-636-55	IC M5218AFP	
IC402	8-759-636-55	IC M5218AFP	
IC403	8-759-009-05	IC MC14051BF	
IC404	8-759-009-05	IC MC14051BF	
IC405	8-759-516-47	IC CD4066BCM	
IC406	8-759-636-35	IC M50760-315FP	
IC501	8-759-823-46	IC LA5603	
IC601	8-759-636-37	IC M50944-121FP	
IC602	8-759-636-67	IC M50925-482FP	
IC603	8-759-207-05	IC TA7272P	
IC604	8-759-636-55	IC M5218AFP	
IC605	8-759-516-41	IC CD4052BCM-FL63	
IC6001	8-759-634-43	IC M51953BFP	
		〈 JACK 〉	
J401	1-565-304-11	JACK, PIN 4P (PHONO IN/DAT OUT)(H3600)	
J401	* 1-569-812-11	JACK, PIN 6P (PHONO/DAT)(H2600)	
J402	* 1-569-812-11	JACK, PIN 6P (DAT IN/VIDEO)(H3600)	
		〈 JUMPER 〉	
JW1	1-216-295-00	METAL CHIP 0 5% 1/10W(H2600)	
JW2	1-216-295-00	METAL CHIP 0 5% 1/10W(H2600)	
JW3	1-216-295-00	METAL CHIP 0 5% 1/10W(H3600)	
JW8	1-216-295-00	METAL CHIP 0 5% 1/10W	
JW10	1-216-295-00	METAL CHIP 0 5% 1/10W	
JW12	1-216-295-00	METAL CHIP 0 5% 1/10W(H3600)	
JW14	1-216-295-00	METAL CHIP 0 5% 1/10W(H2600)	
		〈 COIL 〉	
L601	1-410-761-11	INDUCTOR 0.68mH	
L602	1-410-757-21	INDUCTOR 0.33mH	
L4001	1-408-777-00	INDUCTOR CHIP 10uH	
L6001	1-410-482-31	INDUCTOR 100uH	
L6002	1-408-777-00	INDUCTOR CHIP 10uH	
		〈 TRANSISTOR 〉	
Q101	8-729-805-41	TRANSISTOR 2SC3398	
Q102	8-729-805-42	TRANSISTOR 2SC3859	

Ref. No.	Part No.	Description	Remark
Q201	8-729-805-41	TRANSISTOR 2SC3398	
Q202	8-729-805-42	TRANSISTOR 2SC3859	
Q401	8-729-805-65	TRANSISTOR 2SA1344	
Q402	8-729-805-65	TRANSISTOR 2SA1344	
Q406	8-729-602-36	TRANSISTOR 2SA1602-F	
Q407	8-729-602-21	TRANSISTOR 2SC4154-F	
Q501	8-729-209-15	TRANSISTOR 2SD2012	
Q502	8-729-111-67	TRANSISTOR 2SB1094-L	
Q503	8-729-805-65	TRANSISTOR 2SA1344	
Q504	8-729-602-21	TRANSISTOR 2SC4154-F	
Q505	8-729-602-21	TRANSISTOR 2SC4154-F	
Q506	8-729-602-36	TRANSISTOR 2SA1602-F	
Q601	8-729-805-65	TRANSISTOR 2SA1344	
Q602	8-729-805-65	TRANSISTOR 2SA1344	
Q603	8-729-805-41	TRANSISTOR 2SC3398	
Q604	8-729-805-65	TRANSISTOR 2SA1344	
Q605	8-729-805-69	TRANSISTOR 2SA1341	
Q606	8-729-805-45	TRANSISTOR 2SC3395	
Q607	8-729-805-65	TRANSISTOR 2SA1344	
Q608	8-729-805-65	TRANSISTOR 2SA1344	
Q609	8-729-805-41	TRANSISTOR 2SC3398	
Q611	8-729-805-65	TRANSISTOR 2SA1344	
Q612	8-729-805-41	TRANSISTOR 2SC3398	
Q613	8-729-805-41	TRANSISTOR 2SC3398	
Q616	8-729-804-41	TRANSISTOR 2SB1122-S	
Q617	8-729-804-41	TRANSISTOR 2SB1122-S	
Q619	8-729-808-01	TRANSISTOR 2SD1622-S	
Q620	8-729-808-01	TRANSISTOR 2SD1622-S	
Q6005	8-729-805-41	TRANSISTOR 2SC3398	
		〈 RESISTOR 〉	
R101	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R102	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R103	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R104	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R105	1-216-077-00	METAL CHIP 15K 5% 1/10W	
R106	1-216-058-00	METAL GLAZE 2.4K 5% 1/10W	
R107	1-216-082-00	METAL GLAZE 24K 5% 1/10W	
R108	1-216-043-00	METAL CHIP 560 5% 1/10W	
R109	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R110	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R111	1-216-097-00	METAL CHIP 100K 5% 1/10W	
R112	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R113	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R114	1-216-068-00	METAL CHIP 6.2K 5% 1/10W	
R115	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R116	1-216-079-00	METAL CHIP 18K 5% 1/10W	
R117	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R118	1-216-105-00	METAL CHIP 220K 5% 1/10W	
R119	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R120	1-216-093-00	METAL CHIP 68K 5% 1/10W	
R121	1-216-295-00	METAL CHIP 0 5% 1/10W	
R201	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R202	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R203	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R204	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R205	1-216-077-00	METAL CHIP 15K 5% 1/10W	
R206	1-216-058-00	METAL GLAZE 2.4K 5% 1/10W	
R207	1-216-082-00	METAL GLAZE 24K 5% 1/10W	
R208	1-216-043-00	METAL CHIP 560 5% 1/10W	

MAIN PANEL PIN JACK POWER

Ref. No.	Part No.	Descriptiion				Remark
R209	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R210	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R211	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R212	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R213	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R214	1-216-068-00	METAL CHIP	6.2K	5%	1/10W	
R215	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R216	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R217	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R218	1-216-105-00	METAL CHIP	220K	5%	1/10W	
R219	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R220	1-216-093-00	METAL CHIP	68K	5%	1/10W	
R221	1-216-295-00	METAL CHIP	0	5%	1/10W	
R351	1-216-029-00	METAL CHIP	150	5%	1/10W	
R352	1-216-033-00	METAL CHIP	220	5%	1/10W	
R353	1-216-037-00	METAL CHIP	330	5%	1/10W	
R354	1-216-041-00	METAL CHIP	470	5%	1/10W	
R355	1-216-045-00	METAL CHIP	680	5%	1/10W	
R356	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R357	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	
R359	1-216-045-00	METAL CHIP	680	5%	1/10W	
R362	1-216-041-00	METAL CHIP	470	5%	1/10W	
R363	1-216-045-00	METAL CHIP	680	5%	1/10W	
R364	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R365	1-216-055-00	METAL CHIP	1.8K	5%	1/10W	
R366	1-216-063-00	METAL CHIP	3.9K	5%	1/10W	
R367	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R368	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R369	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R372	1-216-031-00	METAL CHIP	180	5%	1/10W	
R374	1-216-031-00	METAL CHIP	180	5%	1/10W	
R375	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R376	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R377	1-216-085-00	METAL CHIP	33K	5%	1/10W	
R378	1-216-025-00	METAL CHIP	100	5%	1/10W	
R379	1-216-025-00	METAL CHIP	100	5%	1/10W	
R380	1-216-025-00	METAL CHIP	100	5%	1/10W	
R381	1-216-025-00	METAL CHIP	100	5%	1/10W	
R401	1-216-049-00	METAL CHIP	1K	5%	1/10W	(H3600)
R402	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R403	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R404	1-216-041-00	METAL CHIP	470	5%	1/10W	(H3600)
R405	1-216-041-00	METAL CHIP	470	5%	1/10W	
R407	1-216-115-00	METAL CHIP	560K	5%	1/10W	(H3600)
R408	1-216-115-00	METAL CHIP	560K	5%	1/10W	
R409	1-216-115-00	METAL CHIP	560K	5%	1/10W	
R410	1-216-115-00	METAL CHIP	560K	5%	1/10W	(H3600)
R411	1-216-115-00	METAL CHIP	560K	5%	1/10W	
R413	1-216-295-00	METAL CHIP	0	5%	1/10W	(H3600)
R414	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R415	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R417	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R418	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R419	1-216-115-00	METAL CHIP	560K	5%	1/10W	
R420	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R421	1-216-001-00	METAL CHIP	10	5%	1/10W	
R422	1-216-075-00	METAL CHIP	12K	5%	1/10W	
R423	1-216-041-00	METAL CHIP	470	5%	1/10W	
R425	1-216-025-00	METAL CHIP	100	5%	1/10W	
R426	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R427	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R428	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R429	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R430	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R434	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R435	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R436	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R437	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R439	1-216-295-00	METAL CHIP	0	5%	1/10W	
R440	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R441	1-216-295-00	METAL CHIP	0	5%	1/10W	
R442	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R450	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R451	1-216-049-00	METAL CHIP	1K	5%	1/10W	(H3600)
R452	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R453	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R454	1-216-041-00	METAL CHIP	470	5%	1/10W	(H3600)
R455	1-216-041-00	METAL CHIP	470	5%	1/10W	
R457	1-216-115-00	METAL CHIP	560K	5%	1/10W	(H3600)
R458	1-216-115-00	METAL CHIP	560K	5%	1/10W	
R459	1-216-115-00	METAL CHIP	560K	5%	1/10W	
R460	1-216-115-00	METAL CHIP	560K	5%	1/10W	(H3600)
R461	1-216-115-00	METAL CHIP	560K	5%	1/10W	
R463	1-216-295-00	METAL CHIP	0	5%	1/10W	(H3600)
R464	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R465	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R467	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R468	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R469	1-216-115-00	METAL CHIP	560K	5%	1/10W	
R470	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R471	1-216-001-00	METAL CHIP	10	5%	1/10W	
R472	1-216-075-00	METAL CHIP	12K	5%	1/10W	
R473	1-216-041-00	METAL CHIP	470	5%	1/10W	
R475	1-216-025-00	METAL CHIP	100	5%	1/10W	
R476	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R477	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R478	1-216-089-00	METAL CHIP	47K	5%	1/10W	(H3600)
R479	1-216-089-00	METAL CHIP	47K	5%	1/10W	(H3600)
R480	1-216-089-00	METAL CHIP	47K	5%	1/10W	(H2600)
R493	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R494	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R495	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R496	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R500	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R501	1-216-033-00	METAL CHIP	220	5%	1/10W	
R502	1-216-041-00	METAL CHIP	470	5%	1/10W	
R503	1-216-041-00	METAL CHIP	470	5%	1/10W	
R504	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R505	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R601	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R602	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R603	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R605	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R606	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R607	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R608	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R609	1-216-083-00	METAL CHIP	27K	5%	1/10W	
R610	1-216-082-00	METAL GLAZE	24K	5%	1/10W	
R611	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R612	1-216-081-00	METAL CHIP	22K	5%	1/10W	

MAIN PANEL PIN JACK POWER

Ref. No.	Part No.	Descriptiion	Remark
R613	1-216-121-00	METAL CHIP 1M 5% 1/10W	
R614	1-216-121-00	METAL CHIP 1M 5% 1/10W	
R615	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R616	1-216-097-00	METAL CHIP 100K 5% 1/10W	
R617	1-216-097-00	METAL CHIP 100K 5% 1/10W	
R618	1-216-097-00	METAL CHIP 100K 5% 1/10W	
R619	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R620	1-216-097-00	METAL CHIP 100K 5% 1/10W	
R621	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R623	1-216-113-00	METAL CHIP 470K 5% 1/10W	
R624	1-216-039-00	METAL CHIP 390 5% 1/10W	
R625	1-216-064-00	METAL CHIP 4.3K 5% 1/10W	
R626	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R628	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R629	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R630	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R631	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R634	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R635	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R636	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R637	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R638	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R639	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R640	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R641	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R642	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R643	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R644	1-216-025-00	METAL CHIP 100 5% 1/10W	
R645	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R646	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R647	1-216-025-00	METAL CHIP 100 5% 1/10W	
R648	1-216-025-00	METAL CHIP 100 5% 1/10W	
R649	1-216-025-00	METAL CHIP 100 5% 1/10W	
R650	1-216-121-00	METAL CHIP 1M 5% 1/10W	
R651	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R652	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R653	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R654	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R655	1-216-121-00	METAL CHIP 1M 5% 1/10W	
R656	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R661	1-216-083-00	METAL CHIP 27K 5% 1/10W	
R662	1-216-083-00	METAL CHIP 27K 5% 1/10W	
R663	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R664	1-216-045-00	METAL CHIP 680 5% 1/10W	
R665	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R666	1-216-045-00	METAL CHIP 680 5% 1/10W	
R667	1-216-025-00	METAL CHIP 100 5% 1/10W	
R668	1-216-090-00	METAL CHIP 51K 5% 1/10W	
R669	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R670	1-216-084-00	METAL GLAZE 30K 5% 1/10W	
R671	1-216-090-00	METAL CHIP 51K 5% 1/10W	
R672	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R673	1-216-080-00	METAL CHIP 20K 5% 1/10W	
R674	1-216-083-00	METAL CHIP 27K 5% 1/10W	
R675	1-216-080-00	METAL CHIP 20K 5% 1/10W	
R676	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R677	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R678	1-216-084-00	METAL GLAZE 30K 5% 1/10W	
R679	1-216-083-00	METAL CHIP 27K 5% 1/10W	
R680	1-216-090-00	METAL CHIP 51K 5% 1/10W	

Ref. No.	Part No.	Descriptiion	Remark
R681	1-216-090-00	METAL CHIP 51K 5% 1/10W	
R682	1-216-025-00	METAL CHIP 100 5% 1/10W	
R686	1-216-077-00	METAL CHIP 15K 5% 1/10W	
R687	1-216-077-00	METAL CHIP 15K 5% 1/10W	
R690	1-216-025-00	METAL CHIP 100 5% 1/10W	
R691	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R692	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R693	1-216-025-00	METAL CHIP 100 5% 1/10W	
R696	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R699	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R700	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R5001	1-216-025-00	METAL CHIP 100 5% 1/10W	
R5002	1-216-025-00	METAL CHIP 100 5% 1/10W	
R6001	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R6004	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R6005	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R6010	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R6011	1-216-298-00	METAL CHIP 2.2 5% 1/10W	
R6012	1-216-298-00	METAL CHIP 2.2 5% 1/10W	
R6013	1-216-298-00	METAL CHIP 2.2 5% 1/10W	
R6014	1-216-298-00	METAL CHIP 2.2 5% 1/10W	
R6015	1-216-298-00	METAL CHIP 2.2 5% 1/10W	
R6016	1-216-298-00	METAL CHIP 2.2 5% 1/10W	
R6017	1-216-298-00	METAL CHIP 2.2 5% 1/10W	
R6018	1-216-298-00	METAL CHIP 2.2 5% 1/10W	
		(VARIABLE RESISTOR)	
RV101	1-238-547-11	RES, ADJ, CARBON 10K	
RV201	1-238-547-11	RES, ADJ, CARBON 10K	
		(SWITCH)	
S901	1-554-303-21	SWITCH, TACTILE (CD SYNCHRO)	
S902	1-554-303-21	SWITCH, TACTILE (▶▶)	
S903	1-554-303-21	SWITCH, TACTILE (◀◀)	
S904	1-554-303-21	SWITCH, TACTILE (● REC)	
S905	1-554-303-21	SWITCH, TACTILE (DECK B)	
S906	1-554-303-21	SWITCH, TACTILE (DECK A)	
S907	1-554-303-21	SWITCH, TACTILE (COUNTER RESET)	
S908	1-554-303-21	SWITCH, TACTILE (DOLBY NR)	
S909	1-554-303-21	SWITCH, TACTILE (DUBBING MODE)	
S910	1-554-303-21	SWITCH, TACTILE (■)	
S911	1-554-303-21	SWITCH, TACTILE (◁)	
S912	1-554-303-21	SWITCH, TACTILE (▷)	
S913	1-554-303-21	SWITCH, TACTILE (❚❚ PAUSE)	
S914	1-554-303-21	SWITCH, TACTILE (○ MUTE)	
S915	1-554-303-21	SWITCH, TACTILE (DIRECTION MODE)	
		(TRANSFORMER)	
T601	1-450-458-11	TRANSFORMER, DC-DC CONVERTER	
		(TEST PIN)	
TP601	* 1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P	
TP6001	* 1-564-517-11	PLUG, CONNECTOR 2P	
		(CRYSTAL)	
X401	1-577-077-11	OSCILLATOR, CERAMIC 400KHz	
X601	1-577-358-21	VIBRATOR, CERAMIC 4MHz	
X951	1-577-101-11	VIBRATOR, CERAMIC 4.19MHz	

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LEAF SW(A) MD-A LEAF SW(B)

Ref. No.	Part No.	Descriptiion	Remark
	* 1-634-841-11	LEAF SW(A)BOARD ***************	
	3-343-419-01	HOLDER (S SENSOR A)	
		(CONNECTOR)	
CNP81	* 1-568-852-11	SOCKET, CONNECTOR 9P	
		(IC)	
IC81A	8-719-710-03	IC PHOTO REFLECTOR NJL5165K-B	
		(RESISTOR)	
R84	1-249-417-11	CARBON 1K 5% 1/4W	
R85	1-249-408-11	CARBON 180 5% 1/4W	
		(SWITCH)	
S81	1-571-958-11	SWITCH, PUSH (1 KEY) (A. STOP DET)	
S82	1-571-281-21	SWITCH, LEAF (A. CrO2 DET)	
S86	1-571-281-21	SWITCH, LEAF (A. HALF DET)	

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Ref. No.	Part No.	Descriptiion	Remark
	* A-2006-399-A	MD-A BOARD **********	
		(CAPACITOR)	
C11	1-163-131-00	CERAMIC CHIP 390PF 5% 50V	
C12	1-136-157-00	FILM 0.022uF 5% 50V	
C13	1-124-234-00	ELECT 22uF 20% 16V	
C18	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C21	1-163-131-00	CERAMIC CHIP 390PF 5% 50V	
C22	1-136-157-00	FILM 0.022uF 5% 50V	
C23	1-124-234-00	ELECT 22uF 20% 16V	
C28	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C31	1-124-234-00	ELECT 22uF 20% 16V	
C32	1-124-234-00	ELECT 22uF 20% 16V	
C71	1-164-346-11	CERAMIC CHIP 1uF 16V	
		(CONNECTOR)	
CNJ31	* 1-580-782-11	SOCKET, CONNECTOR	
CNP32	* 1-580-772-11	PIN, CONNECTOR (PC BOARD) 4P	
CNP71	* 1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P	
CNP72	* 1-580-411-11	SOCKET, CONNECTOR 4P	
		(IC)	
IC31A	8-759-970-66	IC LM833M	
		(JUMPER)	
JW1	1-216-295-00	METAL CHIP 0 5% 1/10W	
JW51	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW52	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW53	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW54	1-216-296-00	METAL CHIP 0 5% 1/8W	
		(TRANSISTOR)	
Q71A	8-729-602-36	TRANSISTOR 2SA1602	
		(RESISTOR)	
R11	1-216-099-00	METAL CHIP 120K 5% 1/10W	
R12	1-216-025-00	METAL CHIP 100 5% 1/10W	
R13	1-216-100-00	METAL GLAZE 130K 5% 1/10W	
R14	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	
R21	1-216-099-00	METAL CHIP 120K 5% 1/10W	
R22	1-216-025-00	METAL CHIP 100 5% 1/10W	
R23	1-216-100-00	METAL GLAZE 130K 5% 1/10W	
R24	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	
R31	1-216-033-00	METAL CHIP 220 5% 1/10W	
R32	1-216-033-00	METAL CHIP 220 5% 1/10W	
R71	1-216-082-00	METAL GLAZE 24K 5% 1/10W	
R72	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R73	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R74	1-216-089-00	METAL CHIP 47K 5% 1/10W	
		(VARIABLE RESISTOR)	
RV11A	1-238-012-11	RES, ADJ, CARBON 1K	
RV21A	1-238-012-11	RES, ADJ, CARBON 1K	
RV71A	1-238-016-11	RES, ADJ, CARBON 10K	
RV72A	1-238-016-11	RES, ADJ, CARBON 10K	

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Ref. No.	Part No.	Descriptiion	Remark
	* 1-634-841-11	LEAF SW(B) BOARD ****************	
	3-343-419-01	HOLDER (S SENSOR A)	
		(CONNECTOR)	
CNP81	* 1-568-852-11	SOCKET, CONNECTOR 9P	
		(IC)	
IC81B	8-719-710-03	IC PHOTO REFLECTOR NJL5165K-B	
		(RESISTOR)	
R81	1-249-414-11	CARBON 560 5% 1/4W	
R82	1-247-818-11	CARBON 300 5% 1/4W	
R83	1-247-834-11	CARBON 1.3K 5% 1/4W	
R84	1-249-417-11	CARBON 1K 5% 1/4W	
R85	1-249-408-11	CARBON 180 5% 1/4W	
		(SWITCH)	
S81	1-571-958-11	SWITCH, PUSH (1 KEY) (B. STOP DET)	
S82	1-571-281-21	SWITCH, LEAF (B. CrO2 DET)	
S83	1-571-281-21	SWITCH, LEAF (B. METAL DET)	
S84	1-571-281-21	SWITCH, LEAF (B. ERASE PROOF SIDE A)	
S85	1-571-281-21	SWITCH, LEAF (B. ERASE PROOF SIDE B)	
S86	1-571-281-21	SWITCH, LEAF (B. HALF DET)	

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MD-B

Ref. No.	Part No.	Descriptiion	Remark
	* A-2006-400-A	MD-B BOARD **********	
		(CAPACITOR)	
C11	1-163-131-00	CERAMIC CHIP 390PF 5% 50V	
C12	1-136-157-00	FILM 0.022uF 5% 50V	
C13	1-124-234-00	ELECT 22uF 20% 16V	
C14	1-136-273-91	FILM 75PF 5% 630V	
C15	1-164-080-11	CERAMIC 390PF 10% 50V	
C17	1-163-103-00	CERAMIC CHIP 27PF 5% 50V	
C18	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C21	1-163-131-00	CERAMIC CHIP 390PF 5% 50V	
C22	1-136-157-00	FILM 0.022uF 5% 50V	
C23	1-124-234-00	ELECT 22uF 20% 16V	
C24	1-136-273-91	FILM 75PF 5% 630V	
C25	1-164-080-11	CERAMIC 390PF 10% 50V	
C27	1-163-103-00	CERAMIC CHIP 27PF 5% 50V	
C28	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C31	1-124-234-00	ELECT 22uF 20% 16V	
C32	1-124-234-00	ELECT 22uF 20% 16V	
C33	1-124-234-00	ELECT 22uF 20% 16V	
C51	1-163-019-00	CERAMIC CHIP 0.0068uF 10% 50V	
C52	1-163-019-00	CERAMIC CHIP 0.0068uF 10% 50V	
C53	1-163-022-00	CERAMIC CHIP 0.012uF 10% 50V	
C54	1-136-559-11	FILM 0.0047uF 5% 630V	
C56	1-164-505-11	CERAMIC CHIP 2.2uF 16V	
C57	1-164-346-11	CERAMIC CHIP 1uF 16V	
C58	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C71	1-164-346-11	CERAMIC CHIP 1uF 16V	
		(CONNECTOR)	
CNJ31	* 1-580-782-11	SOCKET, CONNECTOR	
CNJ33	* 1-580-782-11	SOCKET, CONNECTOR	
CNP32	* 1-580-781-11	PIN, CONNECTOR (PC BOARD) 7P	
CNP71	* 1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P	
CNP72	* 1-580-411-11	SOCKET, CONNECTOR 4P	
		(DIODE)	
D31	8-719-988-62	DIODE 1SS355	
		(IC)	
IC31B	8-759-970-66	IC LM833M	
		(JUMPER)	
JW1	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW2	1-216-295-00	METAL CHIP 0 5% 1/10W	
JW3	1-216-295-00	METAL CHIP 0 5% 1/10W	
JW4	1-216-295-00	METAL CHIP 0 5% 1/10W	
JW5	1-216-295-00	METAL CHIP 0 5% 1/10W	
JW6	1-216-295-00	METAL CHIP 0 5% 1/10W	
JW7	1-216-295-00	METAL CHIP 0 5% 1/10W	
JW52	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW53	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW54	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW55	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW56	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW57	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW58	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW59	1-216-296-00	METAL CHIP 0 5% 1/8W	

Ref. No.	Part No.	Descriptiion	Remark
JW60	1-216-296-00	METAL CHIP 0 5% 1/8W	
JW61	1-216-296-00	METAL CHIP 0 5% 1/8W	
		(COIL)	
L11	1-410-780-11	INDUCTOR 27mH	
L21	1-410-780-11	INDUCTOR 27mH	
		(TRANSISTOR)	
Q51	8-729-808-01	TRANSISTOR 2SD1622-S	
Q52	8-729-808-01	TRANSISTOR 2SD1622-S	
Q53	8-729-808-01	TRANSISTOR 2SD1622-S	
Q71B	8-729-602-36	TRANSISTOR 2SA1602	
		(RESISTOR)	
R11	1-216-099-00	METAL CHIP 120K 5% 1/10W	
R12	1-216-025-00	METAL CHIP 100 5% 1/10W	
R13	1-216-100-00	METAL GLAZE 130K 5% 1/10W	
R14	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	
R15	⚠ 1-249-430-11	CARBON 12K 5% 1/4W	
R21	1-216-099-00	METAL CHIP 120K 5% 1/10W	
R22	1-216-025-00	METAL CHIP 100 5% 1/10W	
R23	1-216-100-00	METAL GLAZE 130K 5% 1/10W	
R24	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	
R25	⚠ 1-249-430-11	CARBON 12K 5% 1/4W	
R31	1-216-033-00	METAL CHIP 220 5% 1/10W	
R32	1-216-033-00	METAL CHIP 220 5% 1/10W	
R41	⚠ 1-249-393-11	CARBON 10 5% 1/4W	
R42	⚠ 1-249-393-11	CARBON 10 5% 1/4W	
R51	1-216-075-00	METAL CHIP 12K 5% 1/10W	
R52	1-216-075-00	METAL CHIP 12K 5% 1/10W	
R53	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R54	1-216-309-00	METAL CHIP 5.6 5% 1/10W	
R55	1-216-309-00	METAL CHIP 5.6 5% 1/10W	
R56	1-216-298-00	METAL CHIP 2.2 5% 1/10W	
R71	1-216-082-00	METAL GLAZE 24K 5% 1/10W	
R72	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R73	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R74	1-216-089-00	METAL CHIP 47K 5% 1/10W	
		(VARIABLE RESISTOR)	
RV11B	1-238-012-11	RES, ADJ, CARBON 1K	
RV12	1-238-551-11	RES, ADJ, CARBON 220K	
RV21B	1-238-012-11	RES, ADJ, CARBON 1K	
RV22	1-238-551-11	RES, ADJ, CARBON 220K	
RV71B	1-238-016-11	RES, ADJ, CARBON 10K	
RV72B	1-238-016-11	RES, ADJ, CARBON 10K	
		(RELAY)	
RY31	1-515-726-11	RELAY	
		(COIL)	
T51	1-406-419-11	COIL, BIAS OSCILLATION	

****

Note:	Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Descriptiion	Remark
		MISCELLANEOUS *************	
117	1-638-983-11	PC BOARD, MOTOR FLEXIBLE	
HP101	A-2003-868-B	BASE ASSY, HEAD (DECK A)	
HRP101	A-2003-838-A	BASE ASSY, HEAD (DECK B)	
M101A	A-2003-474-A	MOTOR (REEL MOTOR) ASSY (DECK A)	
M101B	A-2003-474-A	MOTOR (REEL MOTOR) ASSY (DECK B)	
M102A	X-3359-417-1	MOTOR (CAPSTAN MOTOR) ASSY (DECK A)	
M102B	X-3359-417-1	MOTOR (CAPSTAN MOTOR) ASSY (DECK B)	

****

HARDWARE LIST

****

# 1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S
# 2	7-621-255-15	SCREW +PTT 2X3 (S)
# 3	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S
# 4	7-621-770-67	SCREW +PTT 2.6X6 (S)
# 5	7-627-556-08	SCREW +P 2.6X2.8
# 6	7-621-775-00	SCREW +B 2.6X3
# 7	7-682-548-04	+BVTT 3X8 (S)

9-956-353-11

Sony Corporation
Audio Group

English
91D1695-1
Printed in Japan

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Published by Customer Relations and Service Group

SS-H2600

SERVICE MANUAL

US Model
Canadian Model
AEP Model
E Model

SPECIFICATIONS

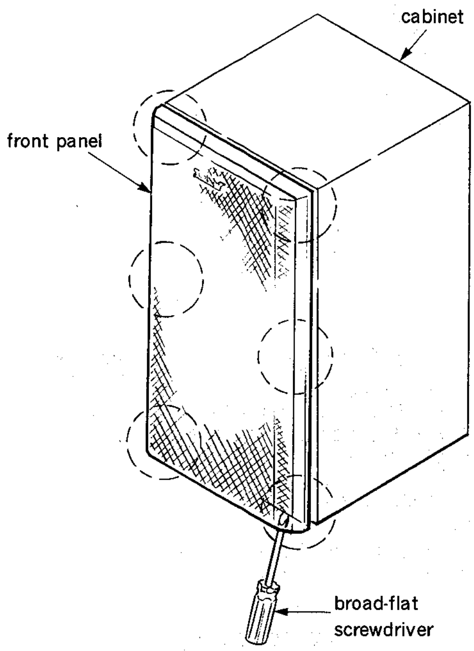
Speaker system	3-way
Speaker units	Woofer: 14cm($5^{1}/_{2}$in.)cone type Tweeter: 6cm($2^{3}/_{8}$in.)cone type Super Tweeter: 2cm($^{13}/_{16}$in.) dome type
Power handling capacity	Maximum input power 70W
Sensitivity	89dB/W/m
Effective frequency range	55-20,000 Hz
Rated impedance	6 ohms
Dimensions	Approx. 185x365x225mm(w/h/d) ($7^{3}/_{8}$ x $14^{3}/_{8}$ x $8^{7}/_{8}$ in.)
Weight	Approx. 4.5 kg per speaker (9 lb 15 oz)

Design and specifications subject to change without notice.

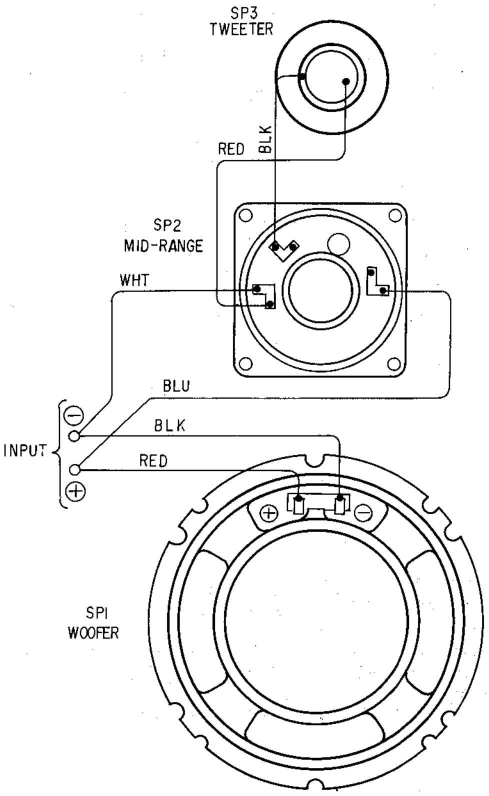
This set is the speaker system in MHC-2600.

1. FRONT PANEL REMOVAL

Note: Be careful not to scratch the cabinet.


cabinet
front panel
broad-flat screwdriver

2. WIRING DIAGRAM


SP3
TWEETER
RED
BLK
SP2
MID-RANGE
WHT
BLU
BLK
RED
INPUT
⊖
⊕
SPI
WOOFER

MICROFILM

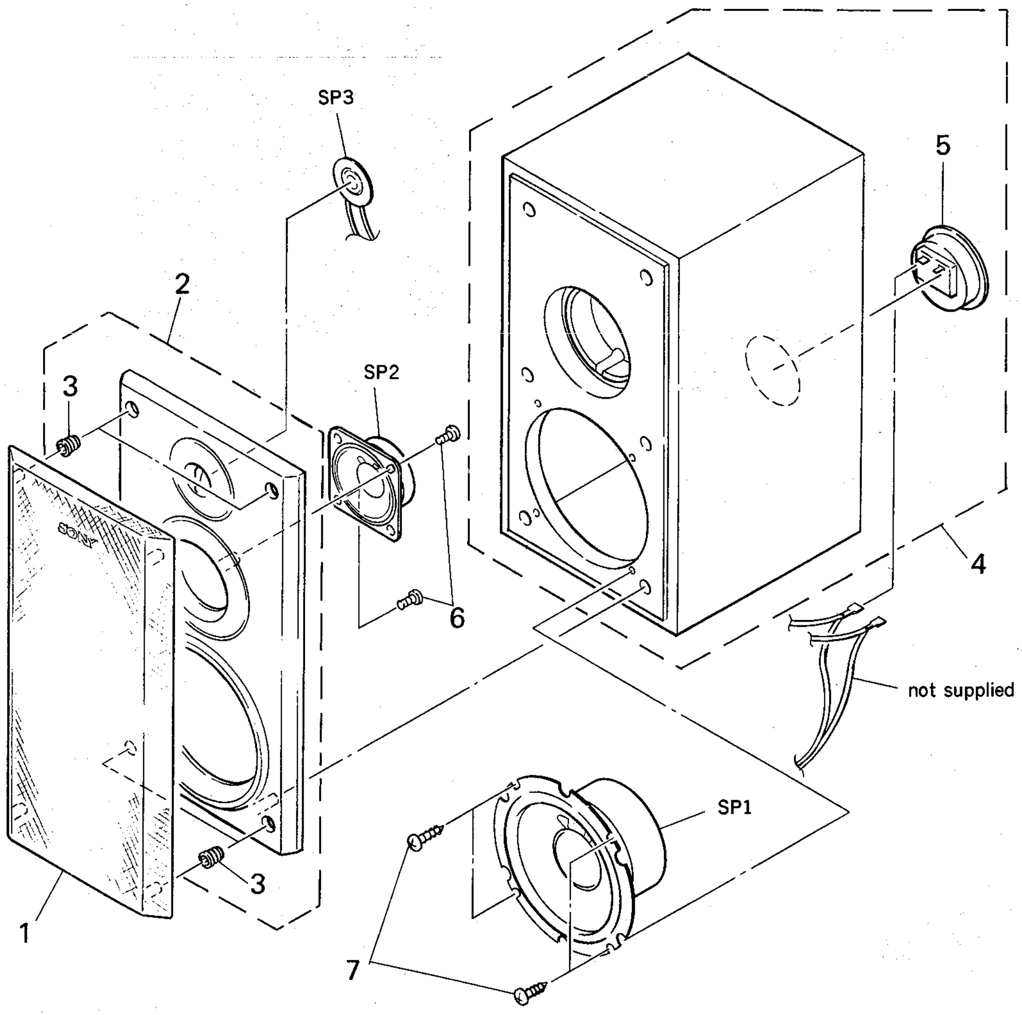
SPEAKER SYSTEM

SONY®

3. EXPLODED VIEW AND PARTS LIST

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE)...(RED)
  ↑ Parts Color ↑ Cabinet's Color



Ref.No	Part No.	Description	Remarks
1	X-4941-328-1	FRAME ASSY, GRILLE	
2	X-4941-403-1	PANEL ASSY, FRONT	
3	*4-912-253-01	CATCHER	
4	X-4941-329-2	CABINET ASSY, SPEAKER (Canadian, AEP, E)	
4	X-4941-404-2	CABINET ASSY, SPEAKER (Germany)	
4	X-4941-438-2	CABINET ASSY, SPEAKER (US)	
5	1-537-145-11	TERMINAL BOARD (SPEAKER)	

Ref.No	Part No.	Description	Remarks
6	3-703-564-01	SCREW, TAPPING	
7	4-874-614-11	SCREW (4) (3.5×14), TAPPING	
SP1	1-544-277-11	SPEAKER (13CM) (EXCEPT FOR US)	
SP1	1-544-425-11	SPEAKER (13CM) (US)	
SP2	1-544-460-11	SPEAKER (6CM)	
SP3	1-544-293-11	SPEAKER (2CM)	

ACCESSORY & PACKING MATERIAL
****

Part No.	Description
1-575-495-11	CORD, SPEAKER (AEP, Germany)
3-753-187-11	MANUAL, INSTRUCTION (AEP, Germany)
*4-857-137-01	CUSHION
3-694-922-01	SHEET, PROTECTION

English
91C0482-1
Printed in Japan
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9-956-279-11

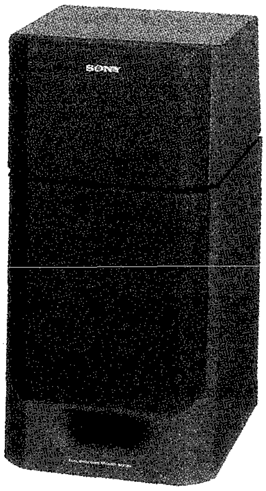
Sony Corporation
Audio Group

Published by Customer Relations and Service Group

SS-H3600

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model



This set is the speaker system in MHC-3600 and FH-E838CD.

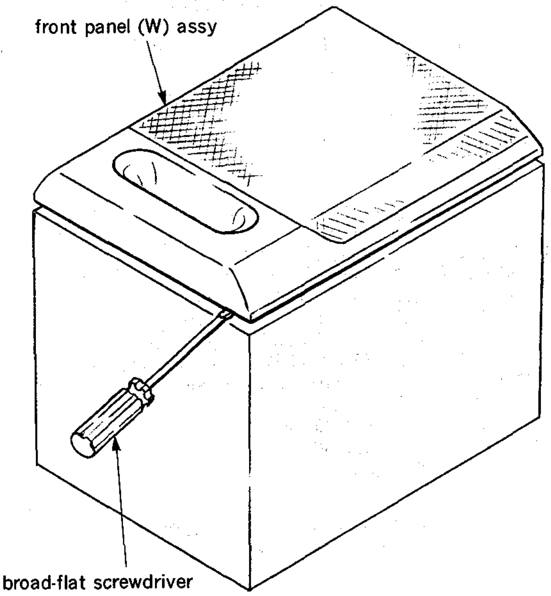
SPECIFICATIONS

Speaker system	3-way, 4-box type
Satellite unit	
Speaker units	Mid-range: 8cm(3 in.) cone type Tweeter: 2cm($^{13}/_{16}$in.) soft dome type
Power handling capacity	Maximum input power 50W
Sensitivity	89 dB/W/m
Effective frequency range	200-20,000 Hz
Rated impedance	8 ohms
Dimensions	Approx. 185x115x220mm(w/h/d) ($7^{3}/_{8}$ x $4^{5}/_{8}$ x $8^{3}/_{4}$ in.)
Weight	Approx. 1.7 kg (3 lb 12 oz)
Bass unit	
Speaker unit	Woofer: 15cm(6 in.) cone type
Power handling capacity	Maximum input power 70W
Sensitivity	89 dB/W/m
Effective frequency range	40-200 Hz
Rated impedance	6 ohms
Dimensions	Approx. 185x250x220mm(w/h/d) ($7^{3}/_{8}$ x $9^{7}/_{8}$ x $8^{3}/_{4}$ in.)
Weight	Approx. 4.1 kg (9 lb 1 oz)

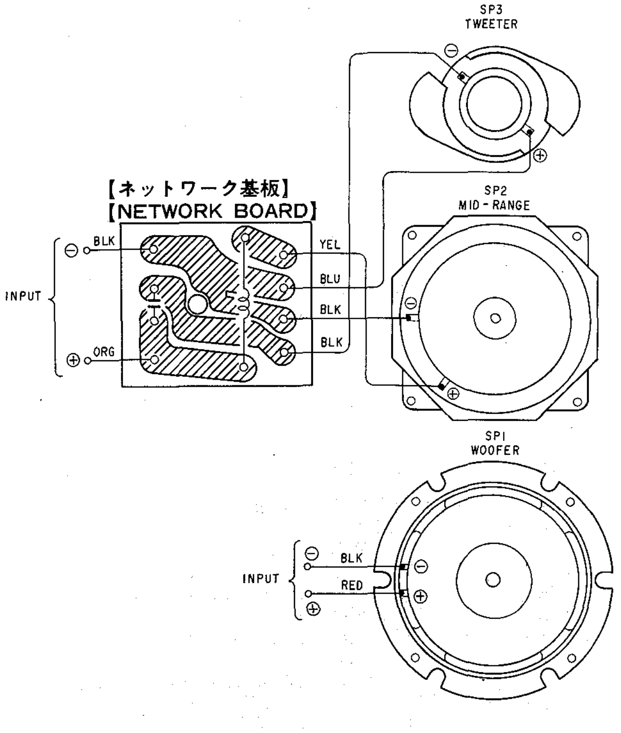
Design and specifications subject to change without notice.

1. FRONT PANEL (W) ASSY REMOVAL

Note : Be careful not to scratch the cabinet.


front panel (W) assy
broad-flat screwdriver

2. WIRING DIAGRAM


SP3
TWEETER
⊖
⊕
【ネットワーク基板】
[NETWORK BOARD]
SP2
MID-RANGE
INPUT
⊖
BLK
⊕
ORG
YEL
BLU
BLK
BLK
⊖
⊕
SP1
WOOFER
INPUT
⊖
BLK
RED
⊕
⊖
⊕

SPEAKER SYSTEM

MICROFILM

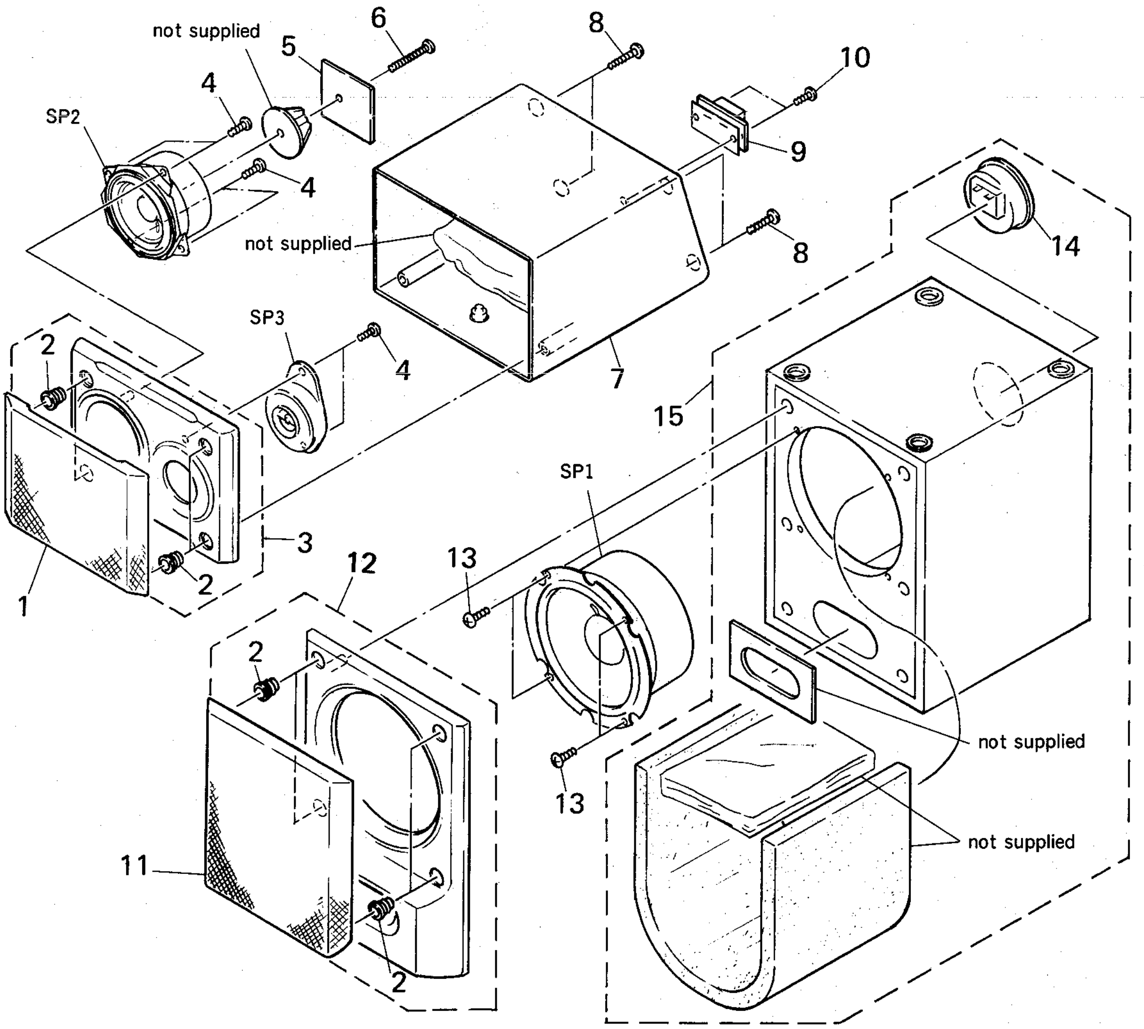
3. EXPLODED VIEW AND PARTS LIST

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts Example:

  KNOB, BALANCE (WHITE)...(RED)

  ↑ Parts Color ↑ Cabinet's Color



Ref.No	Part No.	Description	Remarks
1	X-4941-269-1	FRAME (S) ASSY, GRILLE	
2	*4-912-253-01	CATCHER	
3	X-4941-463-1	PANEL (S) ASSY, FRONT	
4	7-685-660-79	SCREW +BVTP 4×10 TYPE2 IT-3	
5	*1-589-324-11	MOUNTED PC BOARD (NETWORK)	
6	7-685-878-01	SCREW +BVTT 3×25 (S)	
7	X-4941-273-1	CABINET (S) ASSY, SPEAKER (US, Canadian, UK, Australian E)	
7	X-4941-514-1	CABINET (S) ASSY, SPEAKER (AEP, Germany)	
8	7-685-663-79	SCREW +BVTP 4×16 TYPE2 IT-3	
9	1-537-337-31	TERMINAL BOARD (2P SP)	
10	7-685-647-79	SCREW +BVTP 3×10 TYPE2 N-S	

Ref.No	Part No.	Description	Remarks
11	X-4941-271-1	FRAME (W) ASSY, GRILLE	
12	X-4941-439-2	PANEL (W) ASSY, FRONT	
13	4-874-614-11	SCREW (4) (3.5×14), TAPPING	
14	1-537-145-11	TERMINAL BOARD (SPEAKER)	
15	X-4941-401-1	CABINET (W) ASSY, SPEAKER (AEP)	
15	X-4941-402-1	CABINET (W) ASSY, SPEAKER (Germany)	
15	X-4941-464-1	CABINET (W) ASSY, SPEAKER (US, Canadian, UK, Australian E)	
SP1	1-544-434-21	SPEAKER (15CM)	
SP2	1-544-433-11	SPEAKER (8CM)	
SP3	1-544-429-11	SPEAKER (2.5CM)	

ACCESSORY&PACKING MATERIAL

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1-590-855-11	CORD, SPEAKER (AEP, Germany)
3-753-188-11	MANUAL, INSTRUCTION (AEP, Germany)

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